The Dissertation Committee for Saim Kashmiri Certifies that this is the approved version of the following dissertation:

WHEN BUSINESS IS IN THE BLOOD: ESSAYS ON THE LINK BETWEEN FAMILY OWNERSHIP, STRATEGIC BEHAVIOR, AND FIRM PERFORMANCE

Committee:

Vijay Mahajan, Supervisor

Jade DeKinder

Andrew Henderson

Raghunath Singh Rao

Raji Srinivasan

WHEN BUSINESS IS IN THE BLOOD: ESSAYS ON THE LINK BETWEEN FAMILY OWNERSHIP, STRATEGIC BEHAVIOR, AND FIRM PERFORMANCE

by

Saim Kashmiri, BS; MBA

Dissertation

Presented to the Faculty of the Graduate School of

The University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

Doctor of Philosophy

The University of Texas at Austin

May 2012

Acknowledgements

I would like to thank my supervisor, Dr. Vijay Mahajan, for his selfless guidance throughout this work, and for all his kind words of encouragement. I am also grateful to the members of my committee, Dr. Jade DeKinder, Dr. Andrew Henderson, Dr. Raghunath Singh Rao, and Dr. Raji Srinivasan, for their useful suggestions, insights, and support.

I consider myself very fortunate to have enjoyed the full backing of my family in pursuing a PhD in Marketing. I would specially like to thank my wife Maryam Husain, and my two children Ayrah and Raahim, whose love and warmth kept me energized through the ups and downs of working on my dissertation. I am also extremely indebted to my parents Saleem Kashmiri, and Dr. Nosheena Saleem, my parents-in-law Hamid Husain and Farkhunda Husain, and my siblings Maria, Mehroo, and Amr for all their prayers, love, and encouragement.

Finally I would like to acknowledge my late maternal Aunt, Dr. Razia Rafiq, whose love, warmth, and selfless academic coaching during my High school years gifted me with a sound academic foundation — a foundation on which I was later able to build my PhD.

WHEN BUSINESS IS IN THE BLOOD: ESSAYS ON THE LINK BETWEEN FAMILY OWNERSHIP, STRATEGIC BEHAVIOR, AND FIRM PERFORMANCE

Saim Kashmiri, PhD

The University of Texas at Austin, 2012

Supervisor: Vijay Mahajan

Family firms play a significant role in the U.S. economy, making up about 35 percent of S&P 500 or Fortune 500 companies and contributing about 65 percent to the U.S. GDP. This research explores differences in strategic behavior and firm performance between family firms and non-family firms, and further explores whether family firms such as Dell Inc. that use their founding family's name as part of their firm name (termed family-named firms, or FN firms) behave and perform any differently versus family firms such as Gap Inc. whose firm name does not include their family's name (termed non-family-named firms, or NFN firms).

The first study which is based on a multi-industry sample of 130 publicly listed U.S. family firms over a five-year period (2002–2006), reveals that compared to NFN firms, FN firms have significantly higher levels of corporate citizenship and representation of their customers' voice (i.e., presence of a chief marketing officer) in the top management team. FN firms also have a higher strategic emphasis (i.e., a greater emphasis on value

appropriation relative to value creation) compared to NFN firms. Furthermore, FN firms perform better (i.e., have a higher ROA) than NFN firms, and their superior performance is partially mediated by their higher corporate citizenship levels and strategic emphasis.

In the second study ─ an event study of 1294 product introduction announcements of 107 publicly listed U.S. family firms from 2005-2007 ─ I find that relative to NFN firms, FN firms are rewarded more by the stock market for introducing new products. Superior returns to FN firms' new product introductions are partially mediated by these firms' history of trustworthy product-related behavior: FN firms, particularly those with corporate branding, and those wherein a founding family member holds the CEO or Chairman position, are more likely to exhibit a history of avoiding such product-related controversies as product safety issues, and deceptive advertising.

The third study explores differences in strategic behavior and firm performance between family firms and non-family firms in the context of 7 U.S. economic recessions between the years 1970 and 2008. Findings based on a sample of 428 U.S. publicly listed firms reveal that family firms consistently outperform non-family firms during economic recessions. This superior performance is partially driven by family firms' unique strategic behavior: during recessions, family firms maintain higher levels of advertising intensity, exhibit lower financial leverage, and get involved in fewer social and employee-related unethical actions than non-family firms.

The three studies taken together have important implications for family firm, branding, CSR, firm valuation, and innovation-related theory and practice. I highlight these implications in my dissertation.

Table of Contents

List of Tables

List of Figures

CHAPTER ONE: INTRODUCTION

Wal-Mart Stores Inc., Nike Inc., Ford Motor Company, Dell Inc., Walgreen Co., FedEx Co., Marriott International Inc., and Gap Inc. are some of the most well-known and successful firms in the U.S. Interestingly, all these firms have been classified by prior researchers as family firms (Anderson and Reeb 2003). A family firm has been defined as one in which the founder, or a member of the founder's family by either blood or marriage, is an executive officer, director, or blockholder, either individually or as a group (Anderson and Reeb 2003).[1] Family firms play a significant role in the U.S. economy, as they (a) make up about one-third of the companies listed on the S&P 500 and Fortune 500 indices (Anderson and Reeb 2003); (b) constitute about 90% of U.S. firms, in general (Colli 2003); (c) contribute about 65% to the U.S. GDP (Astrachan and Shanker 2003); and (d) employ about 60% of the U.S. workforce (Astrachan and Shanker 2003). Family firms are also the leading players in emerging markets (Aldrich and Cliff 2003), especially in Asia and the Middle East, where they make up around 95% of all firms (Kets de Vries, Carlock, and Florent-Treacy 2007).

Surprisingly, despite the importance of family firms, marketing literature on this unique organizational form is very limited. Admittedly, existing research has established differences between family and non-family firms in such factors as job satisfaction (Beehr, Drexler, and Faulkner 1997), innovation (Tanewski, Prajogo, and Sohal 2003), and corporate social responsibility (Dyer and Whetten 2006). Some researchers have also argued that family firms' performance is inferior to that of non-family firms (Fama and Jensen 1983; Morck, Strangeland, and Yeung 2000). Others, however, have found family firms outperforming non-family firms (Anderson and Reeb 2003; Villalonga and Amit 2006), challenging the perception of the family

[1] This definition has been used by several recent academic studies on family firms such as Anderson and Reeb 2003; Anderson, Mansi, and Reeb 2003; Villalonga and Amit 2006; Ali, Chen and Radhakrishnan 2007.

firm being an ineffective organizational form. Yet, existing research on family firms has a number of important limitations necessitating further research.

First, existing literature implicitly treats family firms as a homogeneous group displaying similar kinds of behavior. It does not explore differences in strategic behavior within the pool of family firms. This leads to the question: Do all family firms behave similarly, or are there different types of family firms that behave differently? More specifically, does the type of name a family firm adopts have any relationship with the firm's strategic behavior?

Second, prior researchers have explored performance differences between family and non-family firms during non-recessionary periods such as the years 1992–1999 or the years 1994–2000 investigated by Anderson and Reeb (2003) and Villalonga and Amit (2006) respectively. Furthermore, in investigating whether family firms outperform non-family firms, prior researchers have shed little light on the mediating mechanisms linking family ownership to firm performance. It is not clear, then, whether family firms outperform non-family firms during periods of business contraction, and whether there is something unique and value-generating about the way family firms behave during recessions that allow them a competitive advantage?

In addressing the first limitation, I classify family firms into two types based on their names. Some family firms, such as Dell, Ford, Walgreen, and Marriott, use their founding family's name as part of their firm name. I refer to these family firms as family-named firms (or FN firms for simplicity). Other family firms like Nike, FedEx, Progressive, and Gap, make no mention of their family name in their firm name.[2] I refer to this group of family firms as non-family-named firms (or NFN firms for simplicity). I then investigate how, if in any way, the strategic behavior of FN firms differs from that of NFN firms.

[2] Nike, FedEx, Progressive, and Gap, were founded by the Knight, Smith, Lewis, and Fisher families respectively. Members of the founding families are still directors, executive officers, or blockholders of their respective firms. Hence these four firms are classified as family firms. Furthermore, since these firms' names are not based on the founding families' names, they are sub-classified as non-family-named firms.

In the first essay of this dissertation, presented in chapter two, I focus on three factors which differentiate the strategic behavior of FN firms from that of NFN firms: the customers' voice in the boardroom (i.e., the choice of including a chief marketing officer in the top management team), strategic emphasis[3] (i.e., relative emphasis on value appropriation versus value creation), and corporate citizenship (i.e., level of corporate social responsibility). My findings based on a multi-industry sample of 130 publicly listed U.S. family firms over a five-year period (2002–2006) show that, compared to NFN firms, FN firms have significantly higher levels of corporate citizenship and representation of their customers' voice (i.e., presence of a chief marketing officer) in the top management team. FN firms also have a higher strategic emphasis (i.e., a greater emphasis on value appropriation relative to value creation) compared to NFN firms. Furthermore, FN firms perform better (i.e., have a higher ROA) than NFN firms, and their superior performance is partially mediated by their higher corporate citizenship levels and higher strategic emphasis.

In the second essay of this dissertation, presented in chapter three, I extend the analysis of the first essay, by exploring whether and how FN and NFN firms differ in their innovation-related behavior and in turn their stock market rewards to new product introductions. Using an event study of 1294 product introduction announcements of 107 publicly listed U.S. family firms from 2005-2007, I find that FN firms are rewarded more by the stock market than NFN firms for introducing new products. Superior stock market returns to family-named firms' new product introductions are partially mediated by these firms' history of trustworthy product-related behavior. Family-named firms, particularly those with corporate branding, and those wherein a founding family member holds the CEO or Chairman position, are found to be more likely to

[3] Strategic emphasis is a relative term that captures the additional resources a firm allocates to differentiation (advertising) versus innovation (R&D). The term was first used by Mizik and Jacobson (2003)

exhibit a history of avoiding such product-related controversies as product safety issues, and deceptive advertising. Such behavior of FN firms helps them develop a reputation of product-related trustworthiness, which in turn helps them experience superior rewards to the introduction of a focal new product.

While the first two essays of this dissertation explore differences in strategic behavior *within* family firms, the third essay, presented in chapter four, explores differences in performance *between* family firms and non-family firms. In line with current research limitations, this analysis is done in the context of economic recessions: (1) Do family firms perform better than non-family firms during recessions? (2) If so, what unique strategic behavior manifested by family firms mediate these firms' superior performance during recessions? My findings based on a sample of 428 U.S. publicly listed firms, over seven U.S. recessions, reveals that family firms consistently outperform non-family firms during recessions. This superior performance is partially driven by family firms' unique strategic behavior: during recessions, family firms maintain higher levels of advertising intensity, exhibit lower financial leverage, and get involved in fewer social and employee-related unethical actions than non-family firms.

Together these three essays have important implications for managers in general and those of family firms in particular. My dissertation also has important implications for literature in the areas of family firm, innovation, CSR, top-management team, and firm valuation. I elaborate on these implications in their respective chapters.

Finally, in chapter five, I discuss some limitations of my dissertation and propose future research directions.

CHAPTER TWO: WHAT'S IN A NAME? AN ANALYSIS OF THE STRATEGIC BEHAVIOR OF FAMILY FIRMS

BACKGROUND

A family firm has been defined as one in which the founder, or a member of the founder's family by either blood or marriage, is an executive officer, director, or blockholder, either individually or as a group (Anderson and Reeb 2003). Family firms, which include such large publicly listed firms as Wal-Mart, Nike, Dell, FedEx, Michelin, Samsung, LG, BMW, and Toyota, play a critical role in the U.S. and most world economies. About 90% of firms in the U.S. are classified as family firms (Colli 2003). Together these firms contribute to about 65% of U.S. GDP (Astrachan and Shanker 2003) and employ about 60% of the U.S. workforce (Astrachan and Shanker 2003).

Surprisingly, despite the importance of family firms, marketing literature on family firms is extremely limited. Although there is some work that has established differences between family firms and non-family firms in such factors as job satisfaction (Beehr, Drexler, and Faulkner 1997), innovation (Tanewski, Prajogo, and Sohal 2003), and corporate social responsibility (Dyer and Whetten 2006), this work treats family firms as a homogeneous group displaying similar kinds of behavior. It does not explore differences in strategic behavior within family firms. Do all family firms behave similarly, or are there different types of family firms that behave differently? To answer this question, perhaps we need to look no farther than firms' names. Some family firms, such as Dell, Ford, Walgreen, and Marriott, use their founding family's name as part of their firm name; others like Nike, FedEx, Progressive, and Gap, do not. I refer to the former group as family-named firms (or FN firms for simplicity), the latter as non-

family-named firms (or NFN firms for simplicity), and explore differences in strategic behavior between these two types of family firms.[4]

One wonders what's in a name. Why would we expect a family firm whose name includes the name of its founding family to behave differently from a family firm whose name makes no mention of its founding family? The answer possibly lies in the differing visibility of the family-firm linkage for the two types of family firms. A firm name like Dell Inc. explicitly communicates that the firm is a family firm and puts the founding family in the spotlight. For a FN firm, then, damage to the firm's reputation is also expected to damage the family's reputation. One would expect FN firms, then, to be relatively more concerned about protecting their reputation. Indeed, Rubenstein (1990) found that senior managers of some 20% of FN firms chose "keeping respect for the family name" as one of their top three priorities, versus 9% of NFN firms.

I expect that this greater emphasis in FN firms on safeguarding the firm's reputation may lead them to behave differently from NFN firms across a number of strategic factors. In the first essay of my dissertation, I focus on three such factors: the customers' voice in the boardroom (i.e., the choice of including a chief marketing officer in the top management team), strategic emphasis (i.e., relative emphasis on value appropriation versus value creation), and corporate citizenship (i.e., level of corporate social responsibility). Admittedly, FN firms and NFN firms may differ across other strategic factors. Nevertheless, given the early stage of development of this research domain, I focus on these three factors in this essay for two reasons: (1) All three factors are clearly linked to firms' emphasis on protecting their reputations, a key theme in this study, and (2) I extend existing research on family firms by exploring differences within family

[4] In my classification, both FN firms and NFN firms are family firms. I neither study nor hypothesize about the behavior of non-family firms. Hence my classification of FN firms does not include firms such as Walt Disney Co., Procter & Gamble, and Nestlé, whose names are based on founding families but whose founding families are no longer involved in the management or ownership of the firms.

firms and, in doing so, focusing on the factors that researchers studying family firms have largely ignored.

I address the following questions in the first essay of my dissertation: (1) How are FN firms and NFN firms likely to differ in terms of customers' voice in the boardroom, strategic emphasis, and corporate citizenship? (2) Do FN firms perform better than NFN firms? (3) If so, is their superior performance mediated by their different strategic behavior? In answering these questions, I contribute to the literature on corporate reputation and firm identity by exploring the reasons that lead different firms to place different degrees of emphasis on protecting their reputations and the effect this emphasis has on their behaviors. I also contribute to the scant literature on family firms by demonstrating that family firms are not a homogeneous group. Instead, different types of family firms behave differently, and a straightforward way of segmenting family firms is by observing their names. Finally, I contribute to the literature on firm valuation by demonstrating that a family firm's name makes a difference to its performance.

The results of this essay reveal that compared to NFN firms, FN firms have significantly higher levels of corporate citizenship and representation of their customers' voice in their top management team. FN firms also have a higher strategic emphasis, allocating a greater proportion of their resources to advertising versus R&D. Furthermore, FN firms perform better (i.e., have a higher ROA) than NFN firms, and their superior performance is mediated by their higher corporate citizenship levels and higher strategic emphasis. Next, I formally articulate my hypotheses.

THEORY AND HYPOTHESES

In this section, I hypothesize a strategic profile of FN firms and provide arguments for the consequences of family-name presence on firm performance.

Strategic factors related to family-name presence

Boardroom composition: Voice of the customer in the boardroom.

For FN firms, the link between the firm and the family is expected to be more explicit in customers' eyes.[5] An explicit firm-family connection means that if the firm image becomes damaged, the image of the family is also expected to suffer. FN firms are therefore expected to place a greater emphasis on ensuring that their customers have a favorable image of the firm and a positive perception of the corporate brand.[6] This emphasis makes it especially important for FN firms to have a customer advocate present in their top management team (TMT). A chief marketing officer (CMO) has been identified as the customer advocate in the firm's upper echelons (McGovern, Court, Quelch, and Crawford 2004), to the degree that the CMO's responsibilities include developing consumer insights and managing customer relationships (Hyde, Landry, and Tipping 2004; Kerin 2005). Given the CMO's role and the criticality of maintaining a positive firm image for FN firms, I would expect such firms to be more likely to have a CMO in their TMT.

Furthermore, FN firms may find it especially advantageous to be customer-centric (versus product-centric). A greater emphasis on customer-centricity (versus product-centricity) makes sense if the firm's customers are more responsive to intangible factors, such as reputation, image, and trust, rather than tangible product offerings (Berthon, Hulbert, and Pitt 1999). Extant

---

[5] I conducted a survey the results of which supported my conjecture that, generally speaking, a FN firm is more likely than a NFN firm to be recognized by consumers as being a family firm. I randomly selected 20 family firms from my sample, 10 FN firms and 10 NFN firms. I ordered these firms randomly and asked 123 undergraduate students whether they considered each firm to be a family firm or a non-family firm. Definitions of "family firms" and "non-family firms" were provided. On average for each of the 20 family firms that students evaluated, **29.6%** of students correctly identified the firm as a family firm. However, students were more likely to consider a FN firm as a family firm. On average each FN firm was identified as a family firm by **45.0% of the students** (the highest was Hilton Hotels Corp., whom 91.1% of students identified as a family firm). By contrast, on average each NFN firm was identified as a family firm by only **14.0% of students** (the lowest was Gap Inc., whom only 3.3% of students identified as a family firm). This difference in proportion between FN firms and NFN firms was statistically significant ($Chi^2(1) = 31.6$, $p < .001$)

[6] A question can be raised: "Relative to FN firms, are NFN firms likely to be less concerned about their reputation in the eyes of investors and employees as well?" While this remains an empirical question, the scope of which goes beyond this dissertation, I conjecture that the difference in recognition of FN firms and NFN firms as being family firms may be larger among customers than among investors and employees. According to the efficient market hypothesis, investors are likely to be aware of all value-relevant publicly available information about firms in which they invest, including whether these firms are family firms. Similarly, relative to customers of NFN firms, employees of NFN firms, because of their greater interaction with the founding family and more thorough knowledge of their firm's background, may be more likely to recognize their firms as family firms. Thus, I hesitate to predict whether NFN firms' lower concern about their reputation as compared to FN firms would extend to the case of investors and employees as well. I encourage future researchers to address this question empirically.

research shows that when customers identify a firm as being a family firm, they tend to trust the firm more (Fukuyama 1996). Indeed, consistent with the resource-based view of the firm (Barney 1991), inasmuch as a family name extends the trustworthy image of most families owning businesses, the family-brand identity is a rare, valuable, imperfectly imitable, non-substitutable resource (Carney 2005; Zahra, Hayton, and Salvato 2004). It especially makes sense, then, for FN firms to leverage this resource to their competitive advantage by being customer-centric. This calls for the presence of a customer representative in the TMT. Hence:

H1. A family-named firm is more likely to have a Chief Marketing Officer in its top management team than a non-family-named firm.

Market Strategy: Strategic emphasis

Firms allocate their limited financial resources between two fundamental processes of creating value and appropriating value (Mizik and Jacobson 2003). Value creation, also called exploration (Levinthal and March 1981), involves producing and delivering products to the market via investments in R&D; value appropriation, also called exploitation (Levinthal and March 1981), involves differentiating and extracting profits in the marketplace via investments in advertising.

Prior research has shown that both R&D expenditures and advertising expenditures are positively associated with firm performance. Bahadir, Bharadwaj, and Parzen (2009) meta-analytic results, for example, show that both R&D expenditures and advertising expenditures are positively related to a firm's organic sales growth. Given financial constraints, however, firms have to make a trade-off between innovation and differentiation. Mizik and Jacobson (2003) operationalized this trade-off by using the term "strategic emphasis," defining "strategic emphasis" as the relative emphasis firms place on differentiation versus innovation (i.e., strategic emphasis = advertising intensity - R&D intensity). Using this term, I explore the question: Do

FN firms and NFN firms differ in their strategic emphasis? I expect FN firms to have a greater strategic emphasis than NFN firms for two main reasons.

First, innovation is inherently risky, and FN firms may be more averse to taking the risk inherent in innovation. The proportion of new products that fail has been reported to be from40% to 90% across product categories (Cierpicki, Wright, and Sharp 2000; Griffin 1997), with highly innovative products failing at a greater rate than less innovative products (Cooper 2000; Golder and Tellis 1993). The failure of a firm's new product is likely to hurt the firm's reputation (Cabral 2009). For a FN firm, however, a failed innovation may be more onerous because it may significantly affect the reputation of the family whose name is part of the firm's name. Hence I expect a FN firm to be less eager to take the risk of pioneering new products, especially radical ones, and more eager to appropriate value from existing products via differentiation.

Second, firms that are clearly recognized by consumers as family firms are perceived as more trustworthy than other firms (Fukuyama 1996). FN firms are more likely to be recognized by consumers as family firms and therefore to be perceived as more trustworthy than NFN firms. To maintain and leverage this trustworthy family-brand equity, it becomes critical for FN firms to invest in both customer relationship management and advertising. A significant allocation of resources toward innovation may take away valuable resources from advertising, which promises to exploit the family brand and provide greater return on investment. Hence:

H2. A family-named firm is likely to have a higher strategic emphasis (relative emphasis on differentiation versus innovation) than a non-family-named firm.

Corporate citizenship: social strengths and social weaknesses

Prior research (e.g., Dyer and Whetten 2006; Godfrey 2005) suggests that firms' levels of corporate citizenship can be measured along two dimensions: (1) social strengths (i.e., instances in which the firm exceeds legal requirements and/or minimum community standards with respect

to a social category), and (2) social weaknesses (i.e., instances in which the firm falls short of legal requirements and/or minimum community standards with respect to a social category). Simply meeting minimum community standards is considered neither a strength nor a weakness. Thus the greater the number of a firm's social strengths and the fewer the number of its social weaknesses, the higher its level of corporate citizenship. The question that arises here is: How are FN and NFN firms likely to differ in their levels of corporate citizenship?

Research indicates that family executives of family firms tend to view their business as an extension of themselves — their identity, or self-view (Dyer 1992; Schein 1983). For FN firms, the firm carries a fundamental part of a family's identity: the family's name. For such firms, family executives are more likely to consider their firm as an extension of themselves. This connection, coupled with research indicating that most people have a positive self-view and want to be perceived positively (Diener and Diener 1995), means that FN firms are likely to launch more positive social initiatives and be involved in fewer social weaknesses. This proposition may explain why the FN firm Weyerhaeuser Inc. was ranked the second most socially responsible firm in its industry by FORTUNE magazine in 2008, while rival NFN firms like Masco Corporation did not even make it to the list (FORTUNE magazine, March 17, 2008). In the words of Dave Larsen, Weyerhaeuser's V.P., Government and Public Affairs: "The real catalyst [of Weyerhaeuser Inc.'s corporate citizenship] was George Weyerhaeuser, Sr. … He wanted to protect and preserve the Weyerhaeuser name and ensure that the company continued to operate according to its founding principles and ethics" (Interdepartmental working group on CSR, 2002).

Furthermore, according to social identity theory, people who identify with a group that develops a bad reputation try switching to groups with better reputations (Baumeister 1998;

Hogg 2003). If a FN firm develops a bad reputation, however, family members cannot, practically, switch groups. Even if they sell their shares, their last name, being part of the firm name, will continue to be reported negatively in the press. This inevitability may make FN firms even more eager to avoid social weaknesses.

A question that arises here is: Is the difference between corporate citizenship levels of FN firms and NFN firms driven primarily by FN firms focusing on launching more positive social initiatives, or by FN firms having fewer social weaknesses? Here, Godfrey (2005) argues that when firms take part in positive social initiatives, they build reserves of goodwill that provide actual insurance-like protection of a firm's underlying relational wealth and earnings streams against loss of economic value. This argument is in line with Klein and Dawar (2004) finding that when consumers have favorable CSR beliefs about a firm, their evaluations of the firms' products are likely to remain resilient in the face of product-harm crises. One may then draw an inference from Godfrey's (2005) article to expect that FN firms would focus on launching more positive initiatives. Rhee and Haunschild (2006), however, show that given greater expectations, firms with good reputations suffer greater market penalties for their transgressions (in their case, product recalls) than firms with poor reputations. FN firms may therefore benefit from focusing on avoiding social transgressions. Nevertheless, as launching positive initiatives and avoiding social transgressions may both help founding families' self-identity, I expect FN firms to take part in more positive social initiatives, as well as become involved in fewer social transgressions:

H3. A family-named firm is likely to have more social strengths than a non-family-named firm.

H4. A family-named firm is likely to have fewer social weaknesses than a non-family-named firm.

Corporate citizenship: Social strengths and social weaknesses

Do FN firms perform better than NFN firms? I expect that FN firms' unique strategic behavior may in turn lead them to perform better versus NFN firms.

Because social transgressions are likely to decrease customer satisfaction (Rhee and Haunschild 2006), firms that avoid such transgressions may avoid consumer penalties, thus improving their performance versus firms that become involved in such transgressions. There is also evidence of the link between positive social initiatives and firm performance, although it is not as conclusive. It has been shown that a firm's participation in positive social initiatives improves brand responses (Brown 1998), brand evaluations (Berens, van Riel and van Bruggen 2005; Klein and Dawar 2004), customer satisfaction (Luo and Bhattacharya 2006), long-term customer loyalty, and customer advocacy behaviors (Du, Bhattacharya and Sen 2007). Improved customer satisfaction, driven by participation in positive social initiatives, has in turn been shown to improve firms' performance levels (Luo and Bhattacharya 2006). Admittedly, some researchers (e.g., McGuire, Sundgren, and Schneeweis 1988) have found no link between investments in social initiatives and firm financial value. All in all, however, I conjecture that more social strengths and fewer social weaknesses both mediate FN firms' superior performance.

As both differentiation and innovation offer advantages to firms (Bahadir et al. 2009), too strong an emphasis on either one at the expense of the other is expected to hurt firm performance. However, prior research suggests that given the lack of reliable measures documenting the effects of advertising, marketing managers find it difficult to justify advertising expenditures (Rust, et al. 2004), and, consequently, firms tend to consistently under-invest in advertising relative to R&D. Mizik and Jacobson (2003), for example, found that, on average, the stock market reacted favorably when the firms in their sample increased their emphasis on

advertising versus R&D. This result reinforces Teece (1987) view that most firms focus their resources on new product development, paying insufficient attention to restricting the competition via differentiation. Given firms' consistent under-allocation of resources on differentiation, I expect FN firms' greater strategic emphasis to improve their performances.

The effect on firm performance of a CMO's presence in the TMT, however, is not clear. Nath and Mahajan (2008) found no link between CMO presence and firm performance for their sample of firms. Nevertheless, firms with a CMO in their TMT may be better positioned to leverage customer relationships to their financial advantage. Thus I do not hypothesize a mediating effect of the CMO's presence on firm performance but explore this effect empirically. All in all:

H5. Family-named firms perform better than non-family-named firms.

H6. Family-named firms' better performance levels are mediated by (a) their relatively more social strengths, (b) their relatively fewer social weaknesses, and (c) their relatively higher strategic emphasis.

METHODOLOGY

Sample

I chose to observe firms over five years (2002-2006) so that my results did not reflect peculiarities of a particular year. I used two studies to reach my sample: a BusinessWeek survey that tracked the financial performance of S&P 500 family firms from 1993-2002 (BusinessWeek, Nov 10, 2003, p.111) and a survey published by Family Business Magazine, also published in 2003 (http://www.familybusinessmagazine.com), listing the largest 150 public and private family firms in the U.S. However, I used only publicly listed family firms in my sample, as secondary data were not readily available for privately held firms. I had a total of 130 family firms in my

sample, 35 family-named and 95 non-family-named. These 130 family firms belonged to a diverse set of industries, representing 41 different 2-digit SIC codes.

Data Sources and Measures

Data were collected annually from 2002 to 2006 using secondary sources, with S&P's COMPUSTAT and company annual reports being the main sources of data. Family name presence (in the firm name) was the focal independent variable in my analysis, taking the value of 1 for FN firms and 0 for NFN firms. A firm was classified as family-named if the entire last name of the founder or a member of his or her family was part of the firm name. Below, I provide the measures and sources of data for the various variables used in my models.

Model of selection of family name

Modeling family name presence as an exogenous independent variable in my models raises possible endogeneity concerns. More specifically, unobserved factors related to a firm's choice of firm name could be correlated with the firm's strategic behavior. To address endogeneity concerns, I conducted a two-stage Heckman analysis (Heckman 1979). I first estimated a Probit selection model, where the dependent variable was equal to 1 for FN firms and 0 for NFN firms. From the Heckman first stage selection model, I obtained the Mills lambda, which was then included as a control variable in subsequent second stage regression models.

Selection was modeled in terms of the founder's age (at the time the firm was founded),[7] presence of co-founders (coded as a dummy variable taking the value 1 if the firm was founded by more than one family), the firm's being a business-to-business (B2B) firm at the time it was founded (coded as a dummy variable taking the value 1 if the firm primarily sold to industrial customers), the firm's presence in the durable goods category (coded as a dummy variable taking

[7] If a firm had more than one founder, I averaged the age of the founders.

the value 1 if the firms' product portfolio at the time it was founded included durable goods), and the firm's being a services firm (coded as a dummy variable taking the value 1 if the firm primarily provided services rather than products at the time it was founded). Corporate websites and secondary sources on founders' biographies (such as *Who's Who in Finance and Industry* and *Who's Who in America*) were used to code these variables. I controlled for the founder's age because older founders, given their broader social networks, may be more likely to leverage their last name as part of their firm name. I controlled for the presence of co-founders because firms that have more than one founding family may be more likely to opt for a generic firm name than to use only one of the founding families' names. I controlled for B2B, durable goods, and services, because the corporate name may be more influential in driving sales for durable goods and services and sales to industrial customers (Horsky and Swyngedouw 1987; Sethuraman and Tellis 1991), and these variables may therefore influence the choice of firm name.

Model of the customers' voice in the boardroom: Dependent variable and controls

In the model for the customers' voice in the boardroom, CMO presence in the TMT served as the dependent variable. Using Nath and Mahajan's (2008) approach, I looked at firms' annual reports to identify the presence or absence of a CMO in their TMT, coding CMO presence as 1 and CMO absence as 0. A firm was considered to have a CMO if it had an executive officer with the term "marketing" in his or her title. Using COMPUSTAT data, I controlled for firm size (measured as the natural logarithm of firms' sales), level of innovation (measured as the ratio of R&D expenditure to sales), differentiation (measured as the ratio of advertising expenditure to sales), globalization (measured as the proportion of the firm's revenues that come from outside the U.S), diversification (measured using Palepu's (1985) entropy measure based on four- and two-digit-level segment sales), and prior firm performance

(measured as ROA (i.e., ratio of net income to assets in time *t-1*)). I used Villalonga and Amit's (2006) approach to measure and control for family ownership. More specifically, I studied firms' proxy statements filed with the SEC and measured family ownership as the percentage of shares of all classes (e.g., class A and class B) held by members of the founding family. I also controlled for the value of brands owned by the firm (measured as a dummy variable taking the value 1 if at least one brand owned by the firm belonged to Interbrand's best 100 global brands list for the year), and firm age (measured as the natural logarithm of years since the firm was founded). Finally, to account for the possible endogeneity of family-name presence, I included Mills lambda as a control variable. I controlled for firm size because larger firms may have a greater tendency to initiate structural choices. I controlled for innovation and differentiation because the success of the strategies of innovation and positioning relies heavily on successful development and deployment of marketing capabilities, processes in which a CMO may help. Diversification was controlled because diversification may result in the delegation of marketing activities to the business level and consequently may decrease the need for a CMO (Nath and Mahajan 2008). Globalization was controlled because more globalized firms may have a greater need for a CMO to implement effective cross-national marketing campaigns. I controlled for prior performance in the event that CMO presence was a response to either poor or superior performance. I controlled for family ownership because firms with a high degree of family ownership may be more concerned with protecting the corporate brand, making them more likely to have a CMO. I controlled for the value of brands owned by the company because firms that own valuable brands may be more concerned about protecting these valuable assets and hence more likely to have a CMO. Finally, I controlled for firm age to account for possible cultural differences between old and young firms that relate to the choice of having a CMO.

Model of market strategy: Dependent variable and controls

I measured strategic emphasis, my dependent variable for each firm *i* at time *t* by equation 1:

$$\text{Strategic emphasis}_{it} = (\text{Advertising intensity})_{it} - (\text{R\&D intensity})_{it}. \quad (1)$$

Advertising intensity was defined as advertising expenditure as a percentage of sales, and R&D intensity was defined as R&D expenditure as a percentage of sales. I controlled for firms' size, prior performance, family ownership, value of brands, firm age (all measured as explained earlier), and leverage (measured as the ratio of long-term debt to common equity). Finally, I included Mills lambda as a control variable to account for endogeneity concerns. I controlled for firm size because larger firms may have more financial slack, allowing them to focus on more long-term value creation. Leverage was controlled because firms with high leverage, given their lower financial flexibility, may substitute more long-term value creation expenditures with short-term value appropriation ones. I controlled for prior performance because strategic emphasis shifts may be an outcome of poor or superior prior performance. Family ownership was controlled because firms with high family ownership may be more concerned with the risk of new product failure. Value of brands was controlled because firms that own valuable brands may allocate a higher proportion of their resources to differentiation versus innovation. Finally, I controlled for firm age because cultural differences between old and young firms may be correlated with firms' strategic emphases.

Models of corporate citizenship: Dependent variables and controls

I used total strengths as the dependent variable in one model and total weaknesses as the dependent variable in the other, relying on KLD Research & Analytics Inc.'s ratings. KLD database has been the most commonly used database by academic researchers for assessing

corporate citizenship (Waddock and Graves 1997; Turban and Greening 1996).[8] KLD ratings have also been found to have acceptable construct validity (Sharfman 1996).

KLD evaluates firms' social strengths and weaknesses in a number of categories, of which I used four categories referenced most widely in CSR articles: corporate governance, diversity, community relations, and employee relations. For social strengths, a firm is given a 0 if it had not launched any positive initiative; otherwise, KLD gives the firm a count rating, based on the number of subcategories in which the firm launched a positive initiative. Similarly, for social weaknesses, a firm not acting irresponsibly receives a 0; otherwise, KLD gives the firm a count rating based on the number of subcategories in which the firm acted irresponsibly. For each firm and for each year I aggregated the scores from each of the four CSR categories to create a single "total strengths" and a single "total weaknesses" score. I controlled for firm size, leverage, prior performance, family ownership and firm age. I also included Mills lambda as a control variable to account for the possible endogeneity of family-name presence. Firm size was controlled because larger firms may have more financial slack but also may be more bureaucratic, making them more or less likely to invest in CSR initiatives. Similarly, larger firms, because of their greater scope of operations, may be more likely to get involved in negative social activities. I controlled for leverage because firms with low leverage may have more financial flexibility to take part in CSR and for prior performance because CSR activities may be an outcome of inferior or superior prior performance. Family ownership was controlled because firms with high family ownership may be more concerned about protecting the firm's reputation. I controlled for firm age to account for any cultural differences between old and new firms that may be correlated with the firm's level of corporate citizenship.

[8] Papers using KLD have appeared in many peer-reviewed journals such as the *Academy of Management Journal*, *Administrative Science Quarterly*, *Strategic Management Journal*, *Journal of Management*, and *Academy of Management Review* (Turban and Greening 1996; Briscoe and Safford 2008; Hull and Rothenberg 2008; Neubaum and Zahra 2006, and Marquis, Glynn and Davis 2007).

Models of firm performance: Dependent variable and controls

I used return on assets (ROA) as my measure of firm performance. As a robustness check I used return on sales (ROS) as an alternate measure of firm performance, with no significant change in my results. I controlled for firm size, diversification, globalization, and leverage because previous research has shown that these variables can affect firm performance (e.g., Anderson and Reeb 2003; Nath and Mahajan 2008).

ANALYSIS AND RESULTS

Table 2.1 presents descriptive statistics and correlations for all measures, pooled over the period of observation. None of the correlations exceeded .5. For all models discussed, the variance inflation factors were much smaller than the benchmark of 10. Furthermore, all the condition indices associated with the eigenvalues were much smaller than the benchmark of 30. All these tests suggest that there are no significant multicollinearity problems (Kennedy 2003).

Analysis of selection model

I used a Probit regression to model family name presence as dependent on a number of variables discussed earlier. The results of this regression are shown in Table 2.2.

As shown in Table 2.2, the overall model was significant (Prob > chi^2 = .007). B2B firms ($p < .10$) and firms founded by more than one family (p value of co-owner < .05) were found to be less likely to include their family name as part of their firm name. I tried a number of interactions between the independent variables but did not find any improvement in model fit. I used results of this model to calculate Mills lambda and used this as a control variable in the following regressions. Dropping the insignificant variables in the selection model and then calculating Mills lambda did not make any significant change in my subsequent regressions.

Analysis of the Customers' Voice in the Boardroom

Given the binary nature of the dependent variable, CMO presence, I used a random effects panel logistic regression. This approach has been used by other authors (e.g., Hsiao (2003) and Hair et al. (1995)). Because my focal independent variable (family name) was time-invariant, fixed effects could not be estimated, as one would need to drop the family name variable itself. The results of a random effects panel logistic regression are shown in Table 2.3.

Results

As shown in Table 2.3, I found support for H1, the coefficient of family name being positive and significant ($p < .01$). Hence, FN firms are more likely to have a CMO in the TMT. Although not central to my thesis, I also found that firms that have higher levels of innovation are more likely to have a CMO in the TMT. This supports the finding of Nath and Mahajan (2008). The coefficient of Mills lambda is significant. Hence, considering family-name presence as an exogenous variable, while modeling CMO presence, would lead to omitted variable bias. I also considered a number of interactive effects between family-name presence and the other control variables but did not find any evidence of an interactive effect. In a separate analysis, I conducted a number of robustness checks. Besides ROA_{t-1}, I used alternative measures of prior performance such as ROS_{t-1}. Similarly, I used alternate measures of firm size, such as the natural logarithm of the firm's assets and the natural logarithm of the firm's number of employees. My overall conclusions remained robust to these alternate measures. To account for possible autocorrelation between the error terms, I also tried a generalized estimating equations (GEE) model (Zeger and Liang 1986) using a logit link, binomial distribution, and AR(1) error

correlation structure (i.e., assuming correlation between the error terms at time *t* and time *t-1*). My overall conclusions remained robust to this alternate specification.

Analysis of market strategy

Because the dependent variable, strategic emphasis, is a continuous variable with both positive and negative values, I used a random effects GLS regression model, the results of which are shown in Table 2.4. In Model A, I included all control variables highlighted earlier. In Model B, I retained only those control variables found to be significant in Model A because, in the presence of superfluous independent variables, the standard error of the coefficient of family-name presence is overestimated, making this variable appear less significant (Kennedy 2003).

Results

As Table 2.4 shows, I found support for hypothesis H2, the coefficient of family name being positive and significant in both Model A ($p < .05$) and Model B ($p < .01$). Thus, FN firms are likely to have greater strategic emphasis versus NFN firms. Among the controls, larger firms were likely to have greater strategic emphasis while firms that had lower prior performance were likely to decrease their strategic emphasis in the subsequent year. As expected, firms with greater family ownership were also likely to have greater strategic emphasis relative to firms with lower family ownership. The coefficient of Mills lambda was non-significant. Thus, assuming exogeneity of family-name presence would not lead to endogeneity bias. Removing Mills lambda and other superfluous variables (Model B) only improved the significance of family-name presence ($p < .01$ vs. $p < .05$). Using alternative measures of prior performance or alternate measures of advertising and R&D intensities (i.e., as a ratio of assets instead of sales), did not

change my conclusions. Furthermore, using an AR(1) correlation structure, rather than assuming lack of serial error correlation, did not change my conclusions.

Analysis of corporate social responsibility

I used separately the total social strengths and the total social weaknesses as the dependent variable in my analysis. In each case, because the dependent variable is a count variable, I used a negative binomial regression, results of which are shown in Table 2.5. I opted for a negative binomial regression instead of a Poisson regression because the latter assumes that the mean and the variance of the dependent variable's frequency distribution are equal. This assumption, as the descriptive statistics in Table 2.1 reveal, was not met.

Results

As Table 2.5 shows, I did not find support for H3; in fact contrary to H3 I found no significant difference between FN firms and NFN firms in the number of positive social initiatives. However, I did find support for H4. The coefficient of family name in the regression with total social weaknesses as the dependent variable was -.39 ($p < .05$). In other words, FN firms are likely to have fewer social weaknesses. That the coefficient of Mills lambda was non-significant in both regressions implies that modeling family-name presence as an exogenous variable does not lead to endogeneity errors. Among the control variables, larger firms were found to take part in more positive social initiatives but also to get involved in more negative social activities. This finding makes intuitive sense. Given that the scale of operations is larger for larger firms, it is likely that larger firms will find themselves getting involved in more categories of social weaknesses. At the same time, larger firms, given their greater financial slack, may find it easier to take part in a number of positive social initiatives.

All in all, my results show that FN firms are likely to have higher levels of corporate citizenship. Although the two types of family firms are not likely to differ in their positive CSR initiatives, FN firms nevertheless are more likely to avoid negative social activities because of a greater concern for their reputation. Therefore, it seems that FN firms are acting in accordance with Rhee and Haunschild's (2006) implicit recommendation of focusing on avoiding social transgressions rather than Godfrey's (2005) implicit recommendation of focusing on building "moral capital." In separate analysis, I checked for the robustness of my results using an ordered Probit regression with robust clustered errors. My results remained robust to this alternate specification.

Analysis of firm performance

To model the effect of family name on firm performance, I used a random effects GLS regression with ROA as the dependent variable. I tested for mediation effects by applying the standard Barron and Kenny (1986) approach. According to this approach, a variable functions as a mediator when variations in the independent variable (i.e., family name presence) significantly account for variations in the proposed mediator (i.e., strategic emphasis, social strengths, or social weaknesses); when variations in the mediator significantly account for variations in the dependent variable (i.e., ROA); and controlling for the mediator, when a previously significant relationship between the independent variable and the dependent variable decreases or becomes insignificant. Results of this analysis appear in Table 2.6.

Results

As Table 2.6 shows, when I did not include the possible mediators (Model 1), family-name presence was associated with higher firm performance, thus supporting H5. To explore the

possible mediating effect of CMO presence, I included CMO presence as an independent variable (Model 2). CMO presence was not associated with firm performance. Moreover, the significance of family-name did not change substantially. Hence, FN firms' superior performance is not mediated by their greater likelihood of having a CMO in their TMT. This result is in line with the finding of Nath and Mahajan (2008) that CMO presence has no significant effect on firm performance. H6a was not supported. Social strengths can only mediate FN firms' superior firm performance if there are significant differences between FN firms and NFN firms in their social strengths to begin with. However, as shown in Table 2.5, I did not find significant differences between FN firms and NFN firms in their social strengths. Furthermore, as shown in Table 2.6, including firms' social strengths (Model 3) did not change the significance of family-name presence significantly, and "social strengths" was not significantly related to firm performance. I did find support, however, for H6b. When I added social weaknesses as a variable (Model 4), the coefficient of social weaknesses was negative and significant, showing that more social weaknesses are associated with lower firm performance. In addition, the significance of family name dropped from being highly significant ($p < .05$) to being marginally significant (p value of .09). H6c was also supported. When strategic emphasis was added as an independent variable (Model 5), the coefficient of strategic emphasis was positive and significant ($p < .01$), and the significance of family-name presence dropped from being marginally significant to being non-significant. Thus, FN firms do perform better than NFN firms, and this superior performance is mediated by FN firms' fewer social weaknesses and greater strategic emphasis. I also tested and found empirical support for the existence of a non-linear relationship between strategic emphasis and firm performance. When I added a quadratic strategic emphasis term as an independent variable (Model 6), the coefficient of the linear term

remained positive and significant ($p < .01$), but the coefficient of the quadratic term was negative and significant ($p < .05$). Thus, increasing strategic emphasis may initially increase firm performance, but beyond a certain value it may decrease firm performance. However, given the coefficients of the linear (.198) and quadratic (-.116) terms, the threshold value of strategic emphasis (.85), beyond which a further increase in strategic emphasis may be associated with a drop in firm performance, is greater than the maximum value of strategic emphasis in my sample (.27). As I can only make inferences within the range of my data, my results suggest that firm performance increases at a decreasing rate with increases in strategic emphasis.

DISCUSSION AND IMPLICATIONS

The purpose of this essay was to address the following three questions: (1) How are family-named firms (FN firms) and non-family-named firms (NFN firms) likely to differ in their strategic behavior in terms of their customer centricity, strategic emphasis, and corporate citizenship? (2) Do FN firms perform better than NFN firms? (3) If so, is their superior performance mediated by their different strategic behavior? I identified a number of factors associated with the presence of a family name in the firm name. I also found that FN firms perform better than NFN firms and that their fewer social transgressions and higher strategic emphasis mediate their superior performance.

Implications for Theory

There is very limited marketing literature on family firms, despite the fact that these firms make up the overwhelming majority of firms in the U.S. Furthermore, the scant literature that does exist, considers these firms as a homogeneous group. Important strategic differences exist within family firms based on the relative visibility of the family-firm linkage and, consequently,

the relative importance that family firms give to maintaining family reputation. Exploring these differences is an area where a major research gap remains. In this essay, I take the first step towards addressing this research gap by exploring how different degrees of concern for owners' reputation and identity may motivate firms to behave differently. Admittedly, my data do not allow for direct testing of the relationship between firms' names and their concern for reputation. Nevertheless, I raise theoretical arguments based on the relative visibility of the family-firm linkage to show why one would expect FN firms to be more concerned about their reputation. I then make inferences about FN firms' greater concern for reputation based on their unique strategic behavior: lower social weaknesses, higher relative emphasis on differentiation versus innovation, and higher levels of the customers' voice in the boardroom. I hope that this essay encourages future researchers to directly examine the psychological and social processes that mediate between family firms' explicit attributes (such as their names) on the one hand and their behavior on the other.

Given the evidence of the positive outcomes associated with corporate citizenship (e.g., Sen and Bhattacharya 2001; Klein and Dawar 2004), it is surprising that according to a report in The Economist (2008), only about 50 percent of firms integrate CSR initiatives into their strategic decisions (Franklin, 2008). Also surprising are the significant differences between firms in their social weaknesses, as revealed by KLD data. Prior research (e.g., Sen and Bhattacharya 2001; Luo and Bhattacharya 2006; Du, Bhattacharya, and Sen 2007), having focused primarily on the consequences of CSR, has shed little light on the factors associated with these differences. Furthermore, as Perrini, Russo, and Tencati (2007) point out, most researchers have implicitly assumed that availability of financial resources is the key driver of positive initiatives and that CSR is a prerogative of large firms. My results suggest that, in addition to financial constraints,

the relative visibility of the family-firm linkage may be at play in firms' corporate citizenship levels. I also highlight the importance of simultaneously studying firms' social weaknesses and positive initiatives to gain a more nuanced understanding of the antecedents of CSR.

Furthermore, an emerging literature stream has explored factors explaining the differential status of marketing within firms (e.g., Verhoef, and Leeflang 2009), the presence of a CMO in the TMT and a greater differentiation focus reflecting a more central role of marketing (Nath and Mahajan 2008). My results suggest that, relative to NFN firms, FN firms place a greater emphasis on marketing, and the marketing department seems to enjoy a greater voice in FN firms' boardrooms. This insight might be meaningful not just to researchers but also to marketing practitioners seeking employment in firms.

Finally, this essay adds to the literature on firm valuation (e.g., Grullon, Kantas and Weston 2004, Pauwels et al. 2004, Deshpandé and Farley 2004) by demonstrating that a family firm's name is linked to its performance. Family firms that include their family name as part of the firm name perform better to the extent that such a firm name makes these firms more socially responsible and differentiation-focused.

Implications for Practitioners

An important issue that family firms frequently face is whether they should use their family name as part of their firm name. According to George C. Hyatt, president of Hyatt's Graphic Supply, a FN firm based in New York:

> It's always been tempting to change our company name and come up with something that's more generic. Our direct competitor, Advantage Sign Supply, uses a generic company name, perhaps appearing bigger than we might appear to be. By having the family name on there, we are being honest, as a true reflection of what our business is all about and how we make decisions every day. It's hard to put on a different suit of clothes and pull off something you aren't. (Pearl, 2003).

Is the family-firm link an asset or liability for firms like Hyatt's Graphic Supply?

This essay provides the following insights to family firm owners like Mr. Hyatt:

- Align your family name with the corporate image you would like to portray: Corporate *image* is "what organizational agents want their external stakeholders to understand is most central, enduring, and distinctive about their organization" (Whetten and Mackey 2002, p. 401). I find that use of the family name is positively associated with corporate social responsibility and the presence of a customer advocate in the TMT. Hence, the corporate image a start-up FN firm portrays to its stakeholders will likely reflect these characteristics. If the image of being socially responsible and customer-centered is critical for the category in which the firm operates, having a family name included in the firm name may help.
- The type of name chosen by a family firm is likely to influence the family firm's strategic path, with a FN firm's path reflecting a significantly greater concern for protecting the family's reputation and a greater desire to leverage the family name via increased differentiation. This strategic path, in turn, is expected to improve firm performance. Hence, including a family-name is expected to help family firms only if it drives such firms along this strategic path. Similarly keeping a generic firm name is not necessarily a liability for the family firm, as long as such a firm name does not lead the firm to be less cautious about social transgressions or less focused on emphasizing value appropriation. In other words, my message to family firm practitioners is that regardless of the way the firm is named, it pays to avoid social transgressions. The results of this essay also suggest that it would benefit firms to increase their current emphasis on differentiation via advertising versus innovation via R&D. However, my results do not suggest that firms should increase their relative emphasis on differentiation indefinitely. Indeed, if the emphasis on differentiation relative to innovation increases beyond a threshold value, firms may see a drop in their performance. The results of this essay do suggest, nevertheless, that this

threshold value lies beyond the maximum value of strategic emphasis in my sample. I therefore conclude that family firms are currently under-allocating their budget on differentiation relative to innovation, and a small shift in their resources toward differentiation might improve these firms' performance.

CHAPTER THREE: A ROSE BY ANY OTHER NAME: ARE FAMILY FIRMS NAMED AFTER THEIR FOUNDING FAMILIES REWARDED MORE FOR THEIR NEW PRODUCT INTRODUCTIONS?

BACKGROUND

I have a ... company [named after me], The Cooper Tea Company. All of our products carry my name... Lending your image to a product definitely gives it that extra dose of credibility. Customers know that you don't put your name on a product unless you believe in it. And in my case, it's certainly the truth. These days I have products that are available all across the nation, and they all have my name on them ... I am proud of the really good teas that I have created, and I want people to know that I stand behind them.

[Barry W. Cooper, Founder, CEO and Chairman of the Cooper Tea Company, as quoted in "Silver Spoons, Mad Baboons, and other Tales of Tea", Cooper Publishing, 2008, 1st Edition, pages 229-230]

Founded in 2003 by Barry W. Cooper, Cooper Tea Company belongs to a unique organizational class — the class of family firms. As discussed in essay 1, given the ubiquity, and economic significance of family firms, it is highly surprising that marketing literature that exists on them is very scant. Admittedly some scholars have identified differences between family and non-family firms with regards such factors as corporate social responsibility (Dyer and Whetten 2006), and globalization (Zahra 2003); however, this work focuses on highlighting unique traits common to all family firms. It does not explore factors that explain the *variance* in strategic behavior and performance *within* family firms. In treating family firms as a homogenous group, current research not only provides limited theoretical understanding on the unique differences that lead some family firms to behave differently versus others, it also provides little guidance to managers of family firms on the strategies they can employ to outperform other family firms.

The first essay of this dissertation was my first step towards bridging this research gap in which I explored how some family firms differ versus others in such strategic factors as their

likelihood to have a CMO, and their strategic emphasis. In my second essay, I investigate another area of critical strategic importance to firms, where there is hardly any work explaining why some family firms behave and perform differently versus others — the area of innovation. More specifically, I investigate the role that family firms' names plays in influencing different family firms' product-related behavior and in-turn their rewards to innovation.

Firms such as Cooper Tea Company, Dell, Ford, Eli Lilly, and Estee Lauder in addition to being family firms are also named after their founding families. Following the classification I used in essay 1, I refer to such family firms as family-named firms or in short FN firms. Other family firms such as EMC, Gap, Molex, and Nike do not include their founding family's name as part of their firm name. Following the classification I used in essay 1, I refer to such family firms as non-family-named firms or in short NFN firms. The question that arises here is: Do all family firms behave and get rewarded similarly by the stock market with regards their new product introductions or do FN and NFN firms differ significantly with regards their product-related behavior and in-turn their stock market rewards to innovation?

In the quote cited earlier, Mr. Barry W. Cooper argues that his firm and its new products carry his name to help communicate these products' 'credibility'. If customers and investors do indeed perceive such new products to be more credible, given an asymmetry of information that typically exists between managers and outside stakeholders regarding the true quality of new products, the stock market rewards to new products may also be greater for products introduced by firms such as Cooper Tea Company relative to products introduced by similar generically-named family firms. This leads me to investigate the following research questions: (1) does the inclusion of the founding family's name as part of a family firm's name influence the firm's degree of trustworthy product-related behavior i.e., the firm's likelihood of introducing products

with good quality and safety standards and supporting these products in the market ethically by avoiding such product-related controversies as deceptive advertising, price fixing, collusion, and predatory pricing; (2) does a history of more trustworthy product-related behavior i.e., a history of introducing products with good quality and safety standards and supporting these products in the market ethically, in turn mediate a family firm's stock market returns to its focal product's announcement? The conceptual framework of this essay is delineated in Figure 3.1.

As shown in Figure 3.1, I argue that all else being equal, FN firms, relative to NFN firms, are likely to be rewarded more by investors for introducing new products. These differences in stock market rewards to new product introductions are in turn mediated by differences in the two differently-named family firms' product-related history: FN firms, to the extent that their firm name puts the founding family in the spotlight, are likely to exhibit a more trustworthy product-related history, i.e., a history of introducing products with sound quality and safety standards and supporting these products with ethical marketing practices.

By exploring the link between the presence of a family-based firm name and the shareholder value impact of new product introductions, I make a number of important theoretical and practical contributions. I extend the scant literature on family firms by providing support to my findings of essay one that family firms are not a homogeneous group. Instead, different family firms behave differently, and a simple way of segmenting family firms is by observing their names. I also add to innovation-related literature particularly with regards the valuation of new product introductions (e.g., Chaney, Devinney, and Winer 1991; Kelm, Narayanan, and Pinches 1995; Sood and Tellis 2009) by highlighting a firm's name as a hitherto unexplored driver of the stock market response to the firm's innovation. Moreover, I extend the literature on corporate reputation and firm identity by exploring the reasons that lead different firms to place

different emphasis on protecting their reputation and the impact this emphasis has on firms' product-related behavior. Finally, I provide practical guidance to managers of family firms, by highlighting the mediating mechanisms that can help family firms in general — both family-named and non-family-named — improve their returns to new product introductions.

I organize the rest of my second essay as follows: I begin by explaining how in the context of family firms, founding families influence their firms' product-related behavior. Next I formally develop my hypotheses, borrowing reputation and identity literature. This is followed by a description of my proposed methodology. I conclude by elaborating on my theoretical and practical contributions, and by proposing some exciting areas of future research.

THEORY AND HYPOTHESES

Role of founding families in shaping family firms' strategic behavior

My main argument on the role played by family firms' names in firms' product-related behavior is built on two implicit assumptions: (1) founding families are *capable* of influencing the strategic behavior of family firms, and (2) founding families of FN firms are likely to be *more motivated* to protect their firms' reputation, than founding families of NFN firms.

Regarding the first assumption, a question can be raised: How do founding families shape family firms' strategic behavior? Founding families are involved in the management and/or the ownership of family firms, by the very definition of family firms provided earlier. Prior research drawing on upper echelon theory has shown that background, experiences, and values of top managers explain the choices they make and therefore the actions adopted by the organizations they lead (Hambrick and Mason 1984). Hence, it is clear that founding families of firms like Dell, Oracle, Ford and FedEx, where the families are part of the firms' senior management, play an integral role in shaping their firms' strategic behavior. Other founding families, such as the families of Analog

Devices, AutoZone, and Pulte Homes, are not part of the firms' senior management, but nevertheless serve on the board of directors, thus indirectly influencing the firm's strategic behavior via selecting, appointing, and reviewing the performance of the CEO. Furthermore, founding families usually exert their influence on their firms' strategic behavior by owning a significant percentage of their firm's equity. These families also tend to use a number of control-enhancing mechanisms (e.g., dual class stocks, pyramidal ownership and cross-holding), which gives them control rights in excess of their cash-flow rights (Faccio and Lang 2002).

Admittedly, the relative influence a founding family has on the firm's corporate affairs varies from one family firm to another. If founding family members hold the critical positions of Chairman or CEO, I expect the founding family to play a stronger, more direct role in shaping their firm's strategic behavior. I later explore the moderating impact of level of family influence on the link between the presence of a family-based firm name and family firms' product-related behavior. Nevertheless, on average, I expect the founding families of family firms (both FN and NFN) to have at least some influence on their firms' strategic behavior.

My second implicit assumption is that even though the founding families of both FN and NFN firms may be equally capable of influencing their firms' strategic behavior, the relative motivation of the two types of families on ensuring their firms' trustworthy product-related behavior may be different. The greater visibility of the family-firm linkage for FN firms in the eyes of customers means that for such firms, the reputation of the firm and the reputation of the family are more closely inter-linked. The founding family of a FN firm, then, is expected to be more eager to safeguard the firm's reputation by ensuring that the firm acts in a trustworthy manner with regards its new product introductions.

As with my first assumption, the visibility of the family-firm linkage in the eyes of customers may also vary from one FN firm to the other; consequently the families of certain FN firms may be particularly motivated to safeguard their firms' reputation versus others. I later explore the moderating impact of firms' branding strategy on the link between the presence of a family-based firm name and firms' product-related behavior. Nevertheless, on average, I expect the founding families of FN firms (regardless of their firms' branding strategy) to be more motivated than the founding families of NFN firms to safeguard their firms' reputation, resulting in FN firms exhibiting a more trustworthy behavior with regards new product introductions.

I next elaborate on both of my two implicit assumptions, and present my hypotheses:

Relation between presence of a family-based firm name and trustworthy product-related behavior

As explained in essay 1, prior research (e.g., Szwajkowski and Figlewicz 1999; Dyer and Whetton 2006) suggests that firms' trustworthy behavior with reference to categories such as employee relations, community relations, or new product introductions, can be measured along two dimensions: (1) "strengths" i.e., instances wherein the firm exceeded legal requirements and/or minimum community standards with reference to the category, and (2) "weaknesses" i.e., instances wherein the firm fell short of legal and/or minimum community standards with reference to the category. Simply meeting minimum community standards is considered neither a strength nor a weakness. Applying this strengths/weaknesses framework to the category of new product introductions, a firms' trustworthy product-related behavior can be measured along two dimensions: (1) "product strengths" i.e., instances wherein the firm exceeded legal requirements and/or minimum community expectations with respect to the quality/safety of a product or the way it was marketed, and, (2) "product weaknesses" i.e., instances wherein the firm got involved

in controversies for introducing poor quality/unsafe products or for using unethical marketing activities (e.g., deceptive advertising, collusive pricing etc.) to support its products. Firms which exhibit a history of many product strengths and few product weaknesses would then be expected to develop a reputation of trustworthy product-related behavior.

Table 3.1 highlights a number of product strengths and weaknesses, as reported by KLD Research & Analytics Inc. KLD evaluates a firm's strengths and weaknesses in a number of categories (e.g., products, employees, environment, etc.) For the purpose of this research, as I was interested in the value of new product introductions, I focused on the most relevant category — the category of products. The question that arises here is: How are FN and NFN firms likely to differ in their trustworthy product-related behavior?

For FN firms, the link between the firm and the family is expected to be more explicit in customers' eyes. In the first essay, I demonstrated via a survey that customers were more likely to correctly recognize a firm to be a family firm, if it was family-named. An explicit firm-family connection means that if the firm's reputation gets hurt, I also expect the reputation of the family to get tarnished. Thus, I expect members of the founding family to place a greater emphasis on preserving firm reputation by ensuring that their firms' new products have good quality and safety standards and that in marketing these products the firm avoids controversies.

Furthermore, prior research indicates that members of a founding family tend to view their business operations as extensions of themselves — their identity, or self-view (Dyer 1992; Schein 1983). For FN firms, the firm carries a fundamental part of a family's identity — the family's name. Hence, for such firms, family executives are more likely to consider their firm as an extension of themselves. This, coupled with research indicating that most people have a positive self-view and want to be perceived positively, (Diener and Diener 1995), means that

family members of FN firms are more likely to emphasize that their firms' new products have superior quality and safety standards and that the firm avoids getting involved in product-related controversies while marketing these products.

Finally, according to social identity theory, people who identify with a group that develops a bad reputation, try switching to groups with better reputations (Baumeister 1998; Hogg 2003). If a FN firm develops a bad reputation, however, family members cannot, practically speaking, switch groups. Even if they sell their shares, their last name, being part of the firm name, will continue to be reported badly in the press. This inevitability may make founding family members of FN firms even more eager to ensure that their firms engage in trustworthy product-related behavior. This leads us to hypothesize:

H_1. A family-named firm is likely to exhibit a history of more product-related strengths than a non-family-named firm.

H_2. A family-named firm is likely to exhibit a history of fewer product-related weaknesses than a non-family-named firm.

Factors moderating the link between presence of a family-based firm name and trustworthy product-related behavior

In proposing that FN firms are likely to exhibit a history of more product-related strengths and fewer product-related weaknesses than NFN firms, I argued that families of FN firms are likely to have a *stronger motivation* of safeguarding firm reputation: there is greater visibility of the family-firm connection in the eyes of customers, and consequently if the firms' reputation were to get damaged (because of the firm getting involved in a product-related controversy), there is expected to be a greater damage to the family reputation. I expect the founding family to be *particularly* eager to protect firm reputation if the family name, in addition to being a part of the firm name, is also a part of the firms' product names i.e., if the firm uses a corporate branding strategy.

Firms differ in their portfolio branding strategy, with corporate branding (also called multi-product branding) and house-of-brands branding (also called multibranding) being the two most commonly used portfolio branding strategies (Kerin, Rudelius, and Hartley 2008). A family firm such as Dell Inc. that exhibits a corporate branding strategy uses its family name (Dell in this case) to not only brand the firm, but also to brand its products. For such a firm, one would expect a relatively larger proportion of customers to be aware of the family-firm connection, and therefore if such a firm were to get involved in unethical product-related behavior, one would expect a *particularly* strong damage to the family reputation. On the other hand, a family firm such as Brown-Forman Corp. that exhibits a house-of-brands strategy, also uses the family name (Brown in this case) as part of the firm name, but uses individual brand names (Jack Daniels, Southern Comfort, Canadian Mist, etc. in this case) for its different products. For such a firm, if an individually-named product was discovered by customers to have been introduced and marketed unethically, to the extent that the product would not carry the founding family's name, one would not expect as many customers to be aware of the family-firm connection. Hence, in this case, the family reputation would be relatively shielded. For such a case, therefore, one would not expect the founding family to be as motivated to protect firm reputation. Thus, I expect the link between the presence of a family-based firm name and firms' trustworthy product-related behavior to be moderated by the firm's portfolio branding strategy.

My argument on the link between the presence of a family-based firm name and firms' trustworthy behavior was also built on the assumption that founding family members are in a position to influence firms' strategic behavior. Admittedly, the level of a founding family's influence on a firm's strategic behavior may vary from firm to firm. For example, founding families are expected to have a relatively lower influence on their firms when both the Chairman

and CEO positions of these firms are held by outsiders as compared to when at least one of these two positions is held by a founding family member. At low levels of family influence within the firm, even though families of FN firms are still expected to be more *motivated* than families of NFN firms to protect their firm's reputation, they may not be *as capable* to influence their firm's strategic behavior. In such cases, I would not expect to see as large a difference between FN and NFN firms in their history of product-related strengths and weaknesses. On the contrary, at high levels of family influence, I expect families of FN firms to be not only more motivated about protecting the firm reputation than families of NFN firms but also more capable to translate this stronger motivation into their firm's more trustworthy product-related behavior. Thus, I expect the link between the presence of a family-based firm name (as is the case of FN firms) and firms' trustworthy product-related behavior to be moderated by the level of influence the founding family has within the firm:

H_3. The positive relation between a family-based firm name and the firm's history of product-related strengths is stronger (weaker) when **(a)** the firm has a corporate branding strategy (house-of-brands strategy), and **(b)** when the founding family's influence within the firm is high (low).

H_4. The negative relation between a family-based firm name and the firm's history of product-related weaknesses is stronger (weaker) when **(a)** the firm has a corporate branding strategy (house-of-brands strategy), and **(b)** when the founding family's influence within the firm is high (low).

Relation between family-name presence and shareholder response to innovation announcements

Do investors react more favorably to FN firms' product introduction announcements relative to NFN firms' product introduction announcements? I expect that FN firms' history of trustworthy product-related behavior may in turn allow them to enjoy superior abnormal stock returns on announcing new products. I present two reasons in support of this expectation.

First, firms get rewarded more to the degree that their products provide superior value to customers versus competition's products (Srinivasan et al. 2009; Kerin, Rudelius, and Hartley

2008). Superior customer value can result from such product-related strengths as the firm having a quality program widely recognized as exceptional or the firm leading its industry in the research and development of innovative products. The fact that many firms lack product-related strengths and therefore fail to provide customers superior value versus competitors' products is considered one of the key reasons 40 percent to 90 percent products across different product categories fail (Cierpicki, Wright, and Sharp 2000; Griffin 1997; Kerin, Rudelius, and Hartley 2008).

Second, product-related weaknesses also result in substantial costs to firms. Both the tangible costs of product-related weaknesses (i.e., fines, civil penalties, and legal fees etc.), and the intangible costs (i.e., loss of firm reputation), have been shown to hurt firm value (Davidson and Worrell 1992; Tipton, Bharadwaj, and Robertson 2009). Tipton, Bharadwaj, and Robertson (2009) for example show that the regulatory exposure of deceptive marketing (one type of product-related weakness), decrease firm value. Using an event study, they show that incidents of exposed deceptive marketing are associated with significant, negative abnormal returns amounting to a drop of 1%, which translates into a wealth loss of $86 million for the median-sized firm in their sample. If a firm has developed a history of such product-related controversies, investors may consider it more likely that a new product introduced by the firm will ultimately result in costly product recalls, product-liability litigations, or misleading product-claim penalties. This may decrease the shareholder value impact of the firm's new product introductions.

Admittedly, the link between a firm's product-related history, and abnormal stock returns surrounding the firm's focal product introduction could from firm to firm. As I explain later, I expect the strength of this link to be moderated by how *diagnostic* external stakeholders perceive a firm's overall product-related history across its *entire* product portfolio to be for how the firm

is expected to behave with regards the *focal* product it is about to introduce. I later explain why I expect firms' product diversification to impact this *diagnosticity* of firms' product-related behavior. Nevertheless, on average, I expect firms' product-related behavior to impact the returns of firms' new product introductions.

In sum, the abnormal stock returns surrounding a new product introduction may reflect, among other factors, investors' expectation of (i) the likelihood that the new product has strengths and is therefore expected to provide superior value to customers versus competitors' products; (ii) the likelihood that the new product will meet the minimum expected product quality standards, and that the firm introducing the product will not get involved in unethical marketing practices while supporting it. For a firm introducing a focal product, the greater the likelihood of product-related strengths, and the lower the likelihood of product-related weaknesses, the greater I expect the abnormal returns surrounding the focal product's introduction to be. Thus, I hypothesize:

H_5. Family-named firms experience superior abnormal returns on introducing new products as compared to non-family-named firms.

H_6. Family-named firms' superior abnormal returns on introducing new products are mediated by **(a)** their history of relatively more product-related strengths, and **(b)** by their history of relatively fewer product-related weaknesses.

Factor moderating the link between trustworthy product-related behavior and abnormal stock returns surrounding product introduction announcements

Firms introduce a number of products and a firm's product-related behavior may differ from product to product with the firm acting in a more trustworthy manner with regards some products (ensuring their quality/safety and avoiding unethical marketing practices to support them) and in a less trustworthy manner with regards other products. I expect, on average, the cumulative behavior of the firm across all its products to signal to investors the expected behavior of the firm with regards the focal new product. However, the strength of the link between firms' prior

product-related history and the abnormal stock returns surrounding the introduction of a focal new product may vary from firm to firm. The strength of this link is expected to depend on how *diagnostic* external stakeholders perceive a firm's overall product-related history across its *entire* product portfolio to be for how the firm is expected to behave with regards the *focal* product it is about to introduce.

When a firm sells products in many product categories, poor quality of a product in one category may not significantly reduce investors' trust for the firm's products in other categories. For example, if one product of a firm with high product diversification turns out to be of low product quality and is recalled, some investors may ascribe this poor quality to the firm's lack of expertise in the product category in focus, and may not feel that this lack of expertise extends to the other categories in which the firm operates. On the contrary, when a firm's level of product diversification is low, for example if the firm only produces products in one category, how the firm has behaved in the past in terms of its quality and ethical marketing behavior may be considered by investors to be more diagnostic of how the firm is expected to behave with regards the focal new product. Thus:

H_7: The positive relation between a firm's history of product-related strengths and abnormal returns of its focal new product's announcement is stronger (weaker) when the firm has low (high) product diversification.

H_8: The negative relation between a firm's history of product-related weaknesses and abnormal returns of its focal new product's announcement is stronger (weaker) when the firm has low (high) product diversification.

METHODOLOGY

Sample

I used an event study on 1294 new product announcements of 107 publicly listed U.S. family firms from 2005-2007 to test my thesis. I observed my sample of family firms over three years (2005-2007) so that my results did not reflect peculiarities of a particular year. I used three

studies to reach my sample of family firms — the sample of family firms used by Anderson and Reeb (2003), a BusinessWeek survey that tracked the financial performance of S&P 500 family firms from 1993-2002 (BusinessWeek, Nov 10, 2003, p.111), and a survey published by Family Business Magazine also published in 2003 (http://www.familybusinessmagazine.com) listing the largest 150 public and private family firms in the U.S. However, I used only publicly listed family firms in my sample, as secondary data were not readily available for privately held firms. I also dropped those family firms for whom I could not find any product introduction announcement during 2005-2007. I was left with a total of 107 family firms in my sample, 32 family-named and 75 non-family-named. These 107 family firms belong to a diverse set of industries, representing 8 different 1-digit SIC codes. I collected reports of product announcements using S&P Capital IQ database. I also conducted a search on LexisNexis between the years 2005-2007. In reaching my sample of 1296 new product announcements, I dropped product announcement events for which there was at least one confounding event within a window of 10 days before and after the announcement[9].

Data Sources and Measures

I collected data annually over 2005-2007 using secondary sources with S&P's COMPUSTAT and company annual reports being the main sources of data. Family-name presence (in the firm name) was the focal independent variable in my analysis taking the value of 1 for FN firms and 0 for NFN firms. A firm was classified as family-named if the entire last name of the founder or a member of his or her family was part of the firm name. I did not encounter any case of a firm changing from being FN to NFN or vice versa during my observation period. Corporate branding

[9] Such events include dividend increases and decreases, earnings announcements, earnings forecasts by management, merger activity, stock offerings, stock repurchases, stock dividends, capital expenditure announcements, divestitures, exchange listing of common stock, convertible debt issuance, and change in CEO or in the top management team.

strategy, level of family influence, and product diversification were the other key independent variables (moderators) I used. Corporate branding strategy was coded as a dummy variable taking the value of 1 if the firm used one brand name across all or most of its products. Family firms where the CEO or Chairman position belonged to the founding family (as found from the proxy statements and annual reports), were classified as firms with high family influence. The values of branding strategy, and family influence also did not change for any firm in my sample during my observation period. Product diversification was measured using Palepu (1985)'s entropy measure based on four- and two-digit-level segment sales. Below, I provide the measures and sources of data for the various dependent and control variables used in my models.

Model of selection of family name

Modeling family name presence as an exogenous independent variable in my models raises possible endogeneity concerns. More specifically, unobserved factors related to a firm's choice of firm name could be correlated with the firm's product-related behavior and in turn the value of product innovations. To address these endogeneity concerns, I conducted a two-stage Heckman analysis (Heckman 1979). I first estimated a probit selection model, where the dependent variable was equal to 1 for FN firms and 0 for NFN firms. From the Heckman first stage selection model, I obtained the inverse mills ratio, which was then included as a control variable in subsequent second stage regression models.

Following the approach I used in essay 1, selection was modeled in terms of founder's age (at the time the firm was founded)[10], presence of co-founders (coded as a dummy variable taking the value 1 if the firm was founded by more than one family), the firm being a Business-to-Business (B2B) firm at the time it was founded (coded as a dummy variable taking the value 1 if the firm

[10] Following the approach I used in essay 1, if a firm had more than one founder, I averaged the age of the founders.

primarily sold to industrial customers), the firm's presence in the durable goods category (coded as a dummy variable taking the value of 1 if the firm's product portfolio at the time it was founded included durable goods), and the firm being a services firm (coded as a dummy variable taking the value 1 if the firm primarily provided services rather than products at the time it was founded). Corporate websites and secondary sources on founders' biographies (such as *Who's Who in Finance and Industry* and *Who's Who in America*) were used to code these variables. I controlled for founder's age because older founders, given that they had more time to establish their name and personal reputation among their contacts, may be more likely to leverage their last name as part of their firm name. I controlled for presence of co-founders as firms that have more than one founding family may be more likely to opt for a generic firm name than use one of the founding family's name. I controlled for B2B, durable goods and services, as the corporate name may be more influential in driving sales for durable goods, services and for industrial customers (Horsky and Swyngedouw 1987; Sethuraman and Tellis 1991), and these variables may therefore influence the choice of firm name (family-based or non-family-based).

Models of product-related history: Dependent variables and controls

I used history of product-related strengths at the time a focal product was announced as the dependent variable in one model, and history of product-related weaknesses at the time a focal product was announced, as the dependent variable in the other model, relying on KLD Research & Analytics Inc.'s ratings. KLD evaluates firms' strengths and weaknesses in a number of categories, of which I used the category of products. For product-related strengths, a firm is given a 0 if it did not have any product-related strength; otherwise, KLD gives the firm a count rating, based on the number of subcategories in which the firm had a strength. Similarly, for product-related weaknesses, a firm not acting irresponsibly receives a 0; otherwise, KLD gives

the firm a count rating based on the number of subcategories in which the firm acted irresponsibly. Details of the sub-categories are given in Table 3.1. For each new product announcement, I added the corresponding firm's product-related strengths for three years preceding the year in which the focal product was announced as a measure of the firm's history of product-related strengths. For example, if a firm introduced a focal product in 2007, I added the firm's product-related strengths for 2004, 2005, and 2006, as a measure of the firm's history of product-related strengths. Similarly for each new product announcement, I added the corresponding firm's product-related weaknesses for three years preceding the year in which the focal product was announced as a measure of the history of product-related weaknesses. I controlled for corporate branding strategy, family influence, firm size, firm age, globalization, and diversification. The values of all these control variables represented their average values for three years preceding the year in which the focal product was introduced[11]. I also included inverse mills ratio as a control variable to account for the possible endogeneity of family-name presence. I controlled for corporate branding and family influence as firms with corporate branding strategy may exhibit a history of more product strengths and fewer product weaknesses, given a greater influence of the performance of an individual product on the value of the corporate brand. Family influence was controlled for, as families with higher family influence may be more capable of influencing firms' product-related behavior. Firm size was controlled because larger firms may have more financial slack but may also be more bureaucratic making them more or less likely to invest in product-related strengths. Similarly, larger firms, because of their greater scope of operations may be more likely to get involved in product-related weaknesses. Firm age was controlled to account for any cultural differences between old and

[11] The key independent variable family-name presence did not change for any firm over the three years preceding the introduction of a focal product. Similarly, corporate branding and family influence did not change for during the period of our observation. For other independent variables, as a robustness check, I used their values three years prior to the year the focal product was introduced. For e.g.., if a product was introduced in 2007, I used the values of the other independent variables such as globalization, diversification etc., in the year 2004. I did not find any significant change in our overall results.

new firms that may be correlated with the firm's product-related behavior. Diversification and globalization was controlled to account for any differences in family's emphasis on protecting firm reputation depending on how diversified or globalized the firm was.

Models of shareholder value impact of new product announcements: Dependent variable and controls

I used an event study to calculate the cumulative abnormal returns (CAR) for firms surrounding their new product introduction announcements. I used the abnormal return on day 0 as my dependent variable, and family-name presence as the focal independent variable, after controlling for corporate branding, family influence, firm size, firm age, globalization, diversification, R&D intensity (measured as R&D expenditure divided by assets), advertising intensity (measured as advertising expenditure divided by assets), number of new products per year (measured as the average number of products introduced by the firm in the three years preceding the introduction of the focal product), and industry membership (7 1-digit SIC code dummies).[12] My main conclusions remained the same when I used cumulative abnormal returns in the range -1 day to +1 day and -1 day to 0 day from the day of the announcement as alternative dependent variables.

ANALYSIS AND RESULTS

Table 3.2 presents descriptive statistics and correlations for all measures, pooled over the period of observation.

None of the correlations exceeded .5. For all models discussed, the variance inflation factors were much smaller than the benchmark of 10. Furthermore, all the condition indices associated

[12] In these models, the values of the independent variables were measured for the year the new product was announced, since these were the most current values, investors were expected to take into account while reacting to firms' new product announcements. As a robustness check, I measured these values for the year t-1 i.e, one year prior to the focal product announcement, and found that our overall conclusions remained the same.

with the eigenvalues were much smaller than the benchmark of 30. All these tests suggest that there are no significant multicollinearity problems (Kennedy 2003).

Analysis of selection model

I used a probit regression to model family-name presence as dependent on a number of variables discussed earlier. The results of this regression are shown in Table 3.3

As shown in Table 3.3, the overall model was significant (prob > chi^2 = .04). Services firms ($p < .1$) and firms founded by more than one family (p value of co-owner < .01) were found to be less likely to include their family name as part of their firm name. I tried a number of interactions between the independent variables but did not find any improvement in model fit. I used results of this model to calculate inverse mills ratio and used this ratio as a control variable in subsequent regressions. Dropping the insignificant variables in the selection model and then calculating inverse mills ratio did not significantly change results of my subsequent regressions.

Analysis of product-related history

I used, separately, history of product-related strengths, and history of product-related weaknesses, (both measured as explained earlier) as the dependent variable in my analysis. In each case, the dependent variable being a count variable, I used a negative binomial regression. I clustered standard errors (by firm)[13] to account for lack of independence between multiple observations of product-related strengths and product-related weaknesses of some firms. To test for the moderating effect of branding strategy and family's level of influence on the link between the presence of family-based name and history of product-related behavior, I included corporate

[13] Event study methodology treats each event of a firm as independent, and calculates abnormal return of each event of a firm, after taking into account the historical stock price of the firm at the time the event took place. Given this inherent assumption of independence of observations as part of the event study methodology, even though some firms had multiple events, I do not report standard errors clustered by firms in the models with abnormal return as the dependent variable (Tables 3.5-3.6). Nevertheless, my main conclusions remain the same even if I analyze errors clustered by firms in those models.

branding, family influence, and the interaction of both these variables and family-name presence as independent variables. Results of this analysis appear in Table 3.4.

Results

As Table 3.4 shows, I did not find support for $\mathbf{H_1}$; in fact, contrary to $\mathbf{H_1}$, I found no significant difference between FN firms and NFN firms in their history of product-related strengths at the time of announcing a focal product. I also found no support for $\mathbf{H_{3a}}$ and $\mathbf{H_{3b}}$ i.e., for the moderating impact of corporate branding and family influence on the link between family-name presence and product-related strengths. I did find support for $\mathbf{H_2}$ however. The coefficient of family name in the regression with history of product-related weaknesses as the dependent variable (Model 3) was negative and significant (-2.26, $p < .01$). In other words, FN firms are likely to have a history of fewer product-related weaknesses at the time they announce a new product. Among the control variables, larger firms were found to exhibit a history of fewer product-related weaknesses. I also found support for $\mathbf{H_{4a}}$ and $\mathbf{H_{4b}}$. When I added the interaction effects of family-name presence with corporate branding and family influence separately (Model 4), the coefficients of both these interaction variables were found to be negative and significant (p values less than .05 and .01 respectively), while the main effect of family-name presence remained marginally negative ($p < .1$). Thus, I conclude that the negative relation between the presence of family-based firm names and firms' history of product weaknesses is stronger when firms have corporate branding strategy and when the founding family's influence within the firms is high. Inverse mills ratio was found to be negative and significant in both Model 3 and Model 4. This shows that it is important for us to control for the endogeneity of firm name choice, and that unobservable factors that are positively correlated with the probability of a firm

including its founding family's name as part of its firm name are negatively correlated with product-related weaknesses.

Analysis of shareholder value impact of new product introduction announcements

I conducted an event study to analyze the link between the presence of a family-based firm name and the shareholder value impact of firms' new product introductions. The event study methodology which has been used by a number of researchers (e.g., Gielens et al 2008; Agarwal and Kamakura 1995; Boyd, Chandy, and Cunha 2010), assumes that a firm's stock price accurately reflects all available information related to the performance of the firm. As new information becomes public, investors immediately update their expectations about the firm's future cash flows leading to a change in the firm's stock price. I used two models to estimate abnormal stock returns namely Carhart 4-factor model (used by Barth et al. 1998, Madden, Fehle, and Fournier 2006, among others), and Market Model (used by Brown and Warner 1985; Boyd, Chandy, and Cunha 2010; Swaminathan and Moorman 2009, among others). As I discuss later, my overall conclusions remained robust, regardless of my choice of abnormal returns model.

Carhart (1997) 4-factor model:

(1) $$R_{i,t} = \alpha_i + R_{rf,t} + \beta_i(R_{m,t} - R_{rf,t}) + s_i SMB_t + h_i HML_t + u_i UMD_t + \varepsilon_{i,t}$$

Market Model:

(2) $$R_{i,t} = \alpha_i + \beta_i R_{m,t} + \varepsilon_{i,t}$$

- For both models, $R_{i,t}$ denotes the rate of return on the stock price of firm i on day t; $R_{m,t}$ denotes the average rate of return on a benchmark portfolio of market assets over an estimation period preceding the event, α_i is the intercept, and $\varepsilon_{i,t}$ is the residual of the estimation (assumed to be distributed i.i.d. normal). I report results based on an

estimation sample covering 245 to 6 trading days before a new product introduction announcement; however my results remained robust to different estimation windows.

- In the Carhart model, $R_{rf,t}$ denotes the risk-free rate of return in period t, and SMB_t, HML_t, and UMD_t denote the size factor, value factor, and momentum factor respectively.
- For both models, I estimated abnormal returns (AR) for each announcing firm by taking the difference between the observed rate of return $R_{i,t}$ and the expected rate of return $E(R_{i,t})$, i.e., $AR = \varepsilon_{i,t} = R_{i,t} - E(R_{i,t})$.

I also calculated cumulative abnormal return (CAR) for each firm i to account for information leakage:

(3) $$CAR_i[-t_1, t_2] = \sum_{t=-t1}^{t2} \varepsilon_{i,t}$$

Here, t = 0 on the day of the new product introduction announcement. Since CARs depend on the event window chosen, I considered different windows such as [0], [-1 to 0], [-1 to +1]. My main conclusions remain robust to window sizes.

To estimate the relation between the presence of a family-based firm name and the shareholder impact of new product introductions, I regressed CARs on family-name presence (dummy=1 for FN firms) while controlling for a number of firm-specific variables. I controlled for corporate branding strategy, family influence, firm size, firm age, product diversification, firm globalization, R&D intensity, advertising intensity, number of new products per year, and seven 1-digit SIC industry digits. To address concerns of family-name presence being endogenous, I also included inverse mills ratio calculated from the selection model as a control:

(5) $CAR_i [-t_1,t_2] = b_0 + b_1*(\text{family-name presence})_i + b_{2\text{-}11}*(\text{control variables})_{i+} \; b_{12\text{-}18}*(\text{industry dummies})_i$

I tested for mediation of product-related strengths and weaknesses in the link between family-name presence and shareholder value of product announcements by applying the standard Barron and Kenny (1986) approach. According to this approach, a variable functions as a mediator when

variations in the independent variable (i.e., family name presence) significantly account for variations in the proposed mediator (i.e., history of product-related strengths or history of product-related weaknesses), variations in the mediator significantly account for variations in the dependent variable (i.e., CAR), and, when controlling for the mediator, a previously significant relationship between the independent variable and the dependent variable decreases in magnitude or becomes insignificant. Results of this event study analysis are shown in Tables 3.5 and 3.6.

Results

As Table 3.5 shows, I found support for $\mathbf{H_5}$. The coefficient of family-name presence was found to be positive and significant ($p < .01$), regardless of whether the dependent variable (abnormal returns) was calculated using the Carhart-4-factor model (Model 1) or the market model (Model 3).[14] Similarly, as both Model 2 and Model 4 reveal, the positive link between family-name presence and abnormal return was found to be particularly strong when family-named firms had a corporate branding strategy ($p < .01$) and high family influence ($p < .1$). Among the control variables, firms which were larger in size ($p < .05$), had higher R&D intensity ($p < .01$), and high advertising intensity ($p < .01$) were found to be rewarded more by the stock market for announcing new products. This makes intuitive sense, as larger firms may have more slack resources to spend on introducing radical rather than incremental products, while firms which spend more on R&D and advertising may signal to the stock market that their products are of superior quality, and that they will be differentiated in the market place via strong marketing support. Indeed prior researchers have found firm size (Sorescu, Chandy and Prabhu 2003; Blundell, Griffin, and Van Reenen 1999), advertising expenditure (Srinivasan et. al 2009), and

[14] In separate analysis based on the Carhart-4-factor model, I found that for the median market capitalization in our sample at the time of a new product announcement, having a firm name based on the founding family was associated with an additional increase in market capitalization of $19.02 million.

R&D expenditure (Chauvin and Hirschey 1993; Stam 2003), to be positively associated with the returns to innovation.

To explore the possible mediating effect of history of product-related strengths and weaknesses, I added these variables one by one as independent variables (Table 3.6). I did not find support for **H_{6a}**. History of product-related strengths can only mediate FN firms' superior rewards to new product introductions if there are significant differences between FN and NFN firms in their history of product-related strengths to begin with. However, as earlier shown in Table 3.3, I did not find significant differences between FN and NFN firms in their product-related strengths. Furthermore, as shown in Table 3.6, including firms' product-related strengths (Model 2) did not change the significance of family-name presence significantly, and 'product-related strengths' was not significantly related to firm performance. I did find support, however, for **H_{6b}**. When I added history of product-related weaknesses as a variable (Model 3), the coefficient of product-related weaknesses was negative and significant (-.108, $p < .01$), showing that a firm's history of more product-related weaknesses is associated with lower abnormal returns surrounding the firm's focal product's announcement. In addition, with the inclusion of product-related weaknesses as an independent variable, the coefficient of family-name presence became non-significant (.140, $p > .1$). The same conclusions were drawn when I included both strengths and weaknesses simultaneously rather than individually (Model 4), with the superior rewards of FN firms' new product announcements seeming to be driven by these firms' history of relatively fewer product-related weaknesses. Finally, to test **H_7 and H_8**, I added the interaction effects of family-name presence and diversification as independent variables. I found evidence in support for **H_7**. As Model 5 reveals, the interaction effect of strengths and diversification was negative and significant (-.129, $p < .01$). Furthermore, with the inclusion of the interaction variable, the

main effect of strengths became positive and significant (.102, $p < .01$), versus being positive but non-significant previously. Thus, although FN and NFN firms do not differ in their history of product-related strengths, firms which have a history of more product-related strengths are rewarded more for introducing their products, when these firms have low product diversification. I did not find evidence in support for $\mathbf{H_8}$, however. As Model 5 reveals, the interaction effect of weaknesses and diversification was non-significant, while with the addition of the interaction effect, the main effect of weaknesses on shareholder value remained negative and significant. Thus, in the context of new product announcements, in imposing penalties on firms that have a history of more product weaknesses, the stock market does not impose more penalties on firms with low diversification. Investors therefore seem to have an asymmetric reaction to firms' history of product-related strengths and their history of product-related weaknesses. From the point of view of investors, a firm's history of product-related strengths in one product category seems primarily to impact the likelihood that a new product that the firm is introducing will also have strengths if the product is being introduced in the same particular category. On the contrary, product-related weaknesses seem to be perceived by investors as broad firm-specific factors, reflecting the culture of firms. Thus, it seems that if a firm operates in many product categories, investors still consider the firm's overall history of product-related weaknesses, to reflect the probability the firm will act unethically with regards the focal product it is about to introduce.

DISCUSSION AND IMPLICATIONS

The purpose of this essay was to address the following questions: (1) does the inclusion of the founding family's name as part of a family firm's name influence the firm's likelihood of introducing products with good quality and safety standards and supporting these products in the market ethically; (2) does a history of more trustworthy product-related behavior (i.e., a history

of introducing products with good quality and safety standards and supporting these products in the market ethically), in turn mediate a family firm's stock market returns to its focal product's announcement? I hypothesized and found empirical support that relative to non-family-named firms, family-named firms act in a more trustworthy manner with regards their product-related behavior, getting involved in fewer product weaknesses. I indirectly inferred that this greater product-related trustworthy behavior of FN firms is at least partly driven by their founding families' greater emphasis on protecting firm reputation. I proposed firms' branding strategy and the family's level of influence in the firm to moderate the link between family-name presence and product-related behavior. Moreover, I argued that FN firms' unique product-related history helps them enjoy greater stock market rewards on announcing a focal new product. I also argued that firms' product diversification moderates the link between their history of product-related behavior and rewards of new product introductions.

Implications for Theory

This essay has a number of important theoretical contributions.

First, this essay adds to innovation literature particularly with regards valuation of new product introductions (e.g., Chaney, Devinney, and Winer 1991; Kelm, Narayanan, and Pinches 1995; Sood and Tellis 2009). While there seems to be a consensus amongst researchers that innovation increases shareholder value, little consensus surrounds the magnitude of the economic rents to innovation and the determinants of these rents (Sorescu 2011). Prior researchers have demonstrated that such factors related to the innovating firm as firm size (Sorescu, Chandy and Prabhu 2003; Lee and Chen 2009; Blundell, Griffin, and Van Reenen 1999), advertising intensity (Srinivasan et al. 2009) and R&D intensity (Chauvin and Hirschey 1993; Stam 2003) influence the shareholder value impact of innovations. However, even controlling for such factors, a

significant portion of the variance in firms' rewards to innovation still remains unexplained leading scholars to call for further, more nuanced work in this area (Sorescu 2011). To that end, I found that in addition to the factors highlighted by prior researchers, firms' rewards to innovation, at least in the context of family firms, are impacted by the way these firms are named. Thus future researchers who explore the conditions under which innovation is more valuable may be well served by including the innovating firms' names in their investigation.

Second, as discussed in the implications section of essay 1, prior research (e.g. Sen and Bhattacharya 2001; Luo and Bhattacharya 2006; Du, Bhattacharya, and Sen 2007) has focused primarily on the consequences of trustworthy behavior and has shed relatively little light on the antecedents of this behavior. Furthermore, as Perrini, Russo, and Tencati (2007) point out, most researchers have implicitly assumed that the availability of financial resources is the key driver of positive social initiatives, with CSR considered a prerogative of large firms. I provide indirect empirical evidence that in addition to financial constraints, the relative visibility of the family-firm linkage may be at play in firms' product-related trustworthy behavior.

Third, I add to the limited literature on the consequences of negative marketing practices (e.g., Davidson and Worrell 1992; Tipton, Bharadwaj, and Robertson 2009). While prior researchers have found that negative events such as product recalls (Davidson and Worrell 1992) and drug withdrawals (Ahmed, Gardella, and Nanda 2002), can influence stock market value, we know little about the indirect costs associated with such negative events, a point highlighted by Tipton, Bharadwaj, and Robertson (2009). While Tipton, Bharadwaj, and Robertson (2009) provide us with an idea of the indirect costs of negative marketing events, they calculate the financial impact of negative events at the time the negative events take place and do not measure how a history of negative events affects the financial rewards of future product introductions. I

argue that the negative impact of marketing practices such as deceptive marketing is not limited to the direct and indirect costs experienced at the time a negative marketing event such as regulatory exposure of deceptive marketing takes place. On the contrary, firms that engage in deceptive marketing develop a reputation of opportunism, which in turn decreases the financial rewards they obtain from future product introductions. Hence to the extent that no prior research to my knowledge explores the impact of negative marketing events on the rewards of future product introductions my research suggests that the consequences of negative marketing events have so far been understated. In other words, it may be even more important for firms to avoid negative marketing events than what had been considered.

Finally, I extend recent literature which shows that strengths and weaknesses with regards social categories have asymmetric antecedents and consequences and need to be treated separately in research (e.g., Mattingly and Berman 2006). Most researchers who have measured corporate social performance (CSP) using KLD data have measured CSP as a firm's net strengths (i.e., strengths minus weaknesses). Recently, however, Mattingly and Berman (2006) argue that combining strengths and weaknesses can mask the underlying relations, and that "... positive and negative social action are both empirically and conceptually distinct constructs and should not be combined in future research ..." (2006, p. 20). I support and extend Mattingly and Berman's argument by showing that while FN firms' greater concern for reputation drives them to have fewer product-related weaknesses, these firms do not differ from NFN firms with regards product-related strengths. I also show that while the stock market penalizes firms that have a large number of product-related weaknesses, regardless of firms' degree of diversification, the stock market only rewards firms for their product-related strengths, when these firms have low product-diversification. Thus, it seems that in the eyes of investors, firms' history of product-

related strengths only influences the likelihood of the focal new product having strengths, when the firm has low product diversification. On the contrary, it seems that in the eyes of investors, firms' history of product-related weakness influences the likelihood of the focal new product having weaknesses, regardless of the firms' level of product diversification. In other words, investors seem to perceive that a history of product-related weaknesses reflects a low emphasis on ethical behavior by the firm in general; hence, once one of the firm's products is found to have weaknesses, the firm's new products across many diverse product categories may be penalized.

Implications for Practitioners

This essay provides the following practical insights to managers and their stakeholders.

- I find that family name usage is positively associated with product-related trustworthy behavior. Hence the corporate *image* a start-up FN firm portrays to its stakeholders will likely reflect these characteristics. Having a trustworthy image is helpful for firms in general. However, for certain industries such an image may be critical. For example, given the intangible, high-involvement offering provided by financial institutions, financial service firms that have a trustworthy image may hold a significant competitive advantage. Similarly, given the extreme health risk that a faulty new drug may impose on customers, whether a pharmaceutical firm is trustworthy or not is likely to be a critical evaluative criterion used by prospective customers. In such cases where the image of being trustworthy is critical for the category in which a start-up firm operates, and when the start-up firm has little or no history of product-related trustworthy behavior to showcase, having a family name included in the firm name may help.
- I find that firms which get involved in product-related controversies get penalized not only when these controversies are exposed to outside stakeholders (with the magnitude of this penalty

measured by Tipton, Bharadwaj, and Robertson 2009), they continue to get penalized in the future in the form of lower rewards to new product introductions. Thus, it is even more important for firms to avoid product-related controversies, as has been suggested by prior researchers. Furthermore, managers of firms (particularly those with high product diversification), should focus more on avoiding product-related controversies, rather than proactively investing in product-related strengths, if they are to maximize their firms' rewards to innovation.

- My result on the moderating impact of product diversification on the link between history of trustworthy product-related behavior and shareholder value impact of new product introductions reveals that while developing a history of introducing products with more strengths and few weaknesses has benefits, developing this history is particularly important for firms that have low product diversification. While firms with low product diversification do not get penalized more than firms with high product diversification for developing a history of product-related weaknesses, they are nevertheless rewarded more than firms with high product diversification for developing a history of product-related strengths. Thus while developing a history of trustworthy product-related behavior is important for firms in general, managers of firms with low product diversifications should give even more importance towards developing this history.
- Finally, my results have important implications for customers. Customers frequently experience an asymmetry of information when assessing the quality of a new product, or the veracity of advertising claims about the new product. I show that the way a family-firm is named can provide an effective signal to customers about the probability that the firm's new product or its related marketing campaign will result in controversies. Thus, in addition to other evaluative criteria customers use in deciding whether to purchase a new product, they can also benefit by considering something as simple as the name of the firm introducing the product, particularly

when the firm uses its founding family's name also to brand its new product, and when the Chairman or CEO position of the firm is held by a founding family member.

CHAPTER FOUR: BEATING THE RECESSION BLUES: EXPLORING THE LINK BETWEEN FAMILY OWNERSHIP, STRATEGIC BEHAVIOR AND FIRM PERFORMANCE DURING RECESSIONS.

BACKGROUND

As discussed in the first two essays of this dissertation, family firms (defined[15] as a firm for which the founder or a member of his or her family by either blood or marriage is an executive officer, a director, or a blockholder, either individually or as a group) play a critical role in the U.S. and most world economies.

Given the ubiquity and the economic significance of family firms, both in the U.S., and the rest of the world, it is surprising that marketing-related studies on this distinctive organizational form are limited. For example, it is surprising that the question whether family firms differ in their strategic behavior versus non-family firms during economic recessions, and whether their unique behavior in turn makes family firms effective organizational forms, remains largely unanswered. Until recently, most scholars have perceived founding family ownership to be a less profitable ownership structure than dispersed ownership. Some scholars have argued that combining ownership and control allows concentrated shareholders to choose non-pecuniary consumption (Fama and Jensen 1983; Demsetz 1983). Others have observed that founding families often limit senior management positions to their family members, potentially leading to competitive disadvantages versus non-family firms that obtain talent from a diverse labor pool (Morck, Strangeland, and Yeung 2000). Recent empirical evidence, however, most notably that provided by Anderson and Reeb (2003) and Villalonga and Amit (2006), has challenged the perception of the family firm being an ineffective organizational form: drawing on a sample of

[15] As explained in the first two essays, this definition has been used by several recent academic studies on family firms such as Anderson and Reeb 2003; Anderson, Mansi, and Reeb 2003; Villalonga and Amit 2006; Ali, Chen, and Radhakrishnan 2007.. Some researchers, however, have used a threshold level of family ownership in order to define a family firm. Cruz, Gómez-Mejia, and Becerra (2009) for example used a threshold level of 20% firm ownership to categorize a firm as a family firm. As I explain later, I use the less restrictive definition provided by Anderson and Reeb (2006), but conduct a sensitivity analysis to analyze how my results change as the level of family ownership within a family firm changes.

S&P 500 and Fortune 500 firms respectively, these authors have found family firms outperforming non-family firms. Still, a number of research gaps remain. First, prior researchers have explored performance differences between family and non-family firms during non-recessionary periods such as the years 1992–1999 or 1994–2000 investigated by Anderson and Reeb (2003) and Villalonga and Amit (2006) respectively. It is not clear, then, whether family firms outperform non-family firms during periods of business contraction. Second, the mediating mechanisms linking family ownership to firm performance have not been explored, leading to the following managerially relevant question: Is there something unique and value-generating about the way family firms behave during recessions that non-family firms can replicate?

One may wonder: Why is it important to investigate family firms' performance specifically during recessions? First, recessions are events of extreme environmental duress that recur frequently in major world economies. The far-reaching consequences and the frequency of recession events make them important to study in their own right. Furthermore, the kinds of strategies that help firms improve their profitability during business cycle expansions are not necessarily the same as those that help firms sustain their performance during recessions. On the contrary, many firms whose strategies have given them a competitive advantage prior to the onset of a recession have, having failed to change their strategies, fallen behind competitors during the recession. During the 2001 recession, for example, in the U.S., more than 20 percent of firms in the top quartile of performance in their industries dropped to the bottom quartile, and more than 20 percent of firms in the bottom quartile rose to the top quartile (Bain Consulting Report, 2002). It is therefore important to complement my understanding of how firms perform during periods of munificence with an understanding of how they cope with periods of crises.

In light of existing research's limitations I address two questions in the third essay of my dissertation: (1) Do family firms perform better than non-family firms during recessions? (2) If so, what unique strategic behavior manifested by family firms mediate these firms' superior performance during recessions?

While investigating firms' strategic behavior in this essay, I focus on firms' choices related to four types of capital: (1) brand capital, more specifically firms' choice of their levels of advertising, (2) financial capital, more specifically, their choice of the levels of debt, (3) human capital, more specifically, their choice of the levels of corporate citizenship with regards their employees, and (4) social capital[16], more specifically, their choice of their levels of corporate citizenship with regards customers and society in general. These four types of choices are all influenced by: (i) the length of executives' decision horizon, and (ii) the level of concern executives have for their firms' reputation; as discussed later, family firms' executives are expected to differ from those of non-family firms in both these dimensions, and differences in these dimensions are in turn expected to lead to differences across the four highlighted choices.

My results across seven U.S. recessions, between 1970 and 2008, reveal that family firms consistently outperform non-family firms during recessions. This superior performance is partially driven by founding families' less myopic, more long-term approach to investments in market-based assets, and their tendency to maintain a conservative capital structure.

[16] Social capital has been used (1) to reflect the trust a firm enjoys with society in general (Putnam, Leonardi, and Nanetti 1993) or a firm capability that arises from the prevalence of trust for the firm in society (Fukuyama 1996, and (2) to describe a system of relations or ties of the firm with its stakeholders which a firm can mobilize to realize its goals (Coleman 1990). In this study, I use the term 'social capital' in line with the former trust-based definition rather than the latter network-based conceptualization.

THEORY AND HYPOTHESES

Behavior related to Brand Capital: Advertising Intensity

I expect family firms to exhibit higher levels of advertising intensity versus non-family firms during recessions because of two main reasons: (1) a strong desire by founding families to maintain and leverage their family-brand equity during business expansion as well as business contraction periods, and (2) a longer investment horizon for founding families than atomistic shareholders, making them less likely to significantly cut advertising during recessions.

First, from a resource-based perspective, (Barney 1991; Wernerfelt 1984), a resource unique to family firms is their 'familiness' or the family-firm connection: customers perceive brands owned by family firms to be more trustworthy relative to brands of non-family firms (Fukuyama 1996; Zahra 2003). I would therefore expect family firms to be more eager than non-family firms to build and leverage their trustworthy brands via advertising. Hence, I would expect family firms' advertising intensity levels to be higher than those of non-family firms regardless of whether the economy is expanding or contracting.

Second, most firms cut back on advertising during recessions (Deleersnyder et al. 2009). However, I expect family firms to be more reluctant to decrease their advertising, enabling them to have *particularly* superior advertising levels versus non-family firms during recessions. Prior research suggests that a key reason for firms decreasing their advertising is managerial myopia: managers might seek to artificially inflate current-term accounting-based performance by cutting advertising, even though doing so may reduce their firms' brand equity (Aaker 1991) and long-term firm value (Mizik 2011). I expect this short-term bias to be less in family firms versus non-family firms for two reasons. First, founding families see their firms as long-term assets they will pass on to their future generations (Casson 1999) and have their future generations' interests in

mind while making strategic decisions (Landes 2008). Second, many founding family members remain part of their firms' top management teams till their retirement, and are less worried about employment risk and short-term financial results (Gomez-Mejia, Nuñez-Nickel, and Gutierrez 2001). Greater stability in their positions is expected to give family executives an added incentive to continue making long-term investments towards brand capital:

H1. Family firms are likely to have higher advertising intensities than non-family firms during recessions.

Behavior related to Financial Capital: Choice of Capital Structure

I expect a conservative capital structure to be a general characteristic of family firms, a characteristic they continue to exhibit during recessions. I propose two main reasons for family firms' conservative capital structure: (1) families' greater aversion to bankruptcy risk compared to atomistic shareholders given families' undiversified holdings, inter-generation presence, and reputation concerns, and (2) lower agency-principal conflicts in family firms, decreasing the need to use debt as a disciplinary device.

First, family firm owners stand to lose more than shareholders of non-family firms if their firm becomes bankrupt, motivating them to seek low-default capital forms such as equity regardless of whether the economy is contracting or expanding. This is because, rather than holding diversified stock portfolios, family members often invest a significant part of their wealth into a single business (Casson 1999). Furthermore, founding families view their firms as assets they will pass on to future family generations rather than wealth they will consume during their lifetime (Casson 1999), making firm survival especially important for these families. Finally, as discussed in the first essay of this dissertation, founding families' personal reputation is closely inter-related with that of their firms. For founding families, therefore, the cost of their firms' bankruptcy will not only include the tangible loss of family wealth but also the intangible

loss of family reputation, making such families particularly eager that their firm adopts a conservative capital structure.

Second, family firms have lower incentives to use debt as a mechanism to monitor managers. According to Jensen and Meckling (1976), firms' use of debt constraints managerial expropriation by leaving less cash flow available for managers' discretionary expenditures. Family firms, however, may not benefit as much from using debt as a monitoring mechanism. This is because founding families are typically large shareholders or members of the firm's board of directors who have the ability and motivation to acquire the necessary information about non-family managers' behavior at reasonable cost (Grossman and Hart 1980). Moreover, for many family firms, founding family members are both large shareholders as well as top executive officers. This leads to convergence of interest between management and family owners (Demsetz and Lehn 1985), minimizing the need to rely on debt as a disciplinary device. Hence[17]:

H2. Family firms are likely to exhibit a lower debt-to-equity ratio than non-family firms during recessions.

Behavior related to Human Capital: Employee-related Strengths and Weaknesses

Prior research (e.g., Godfrey 2005; Brammer and Millington 2008; Muller and Kräussl 2011; Dyer and Whetten 2006) suggests that firms' level of corporate citizenship can be measured along: (1) strengths (i.e., instances in which the firm exceeds minimum community standards with respect to a corporate citizenship category such as employee relations), and (2) weaknesses (i.e., instances in which the firm falls short of minimum community standards with respect to a corporate citizenship category). Simply meeting minimum community standards is considered neither strength nor a concern. I expect family firms to exhibit higher employee-related corporate

[17] One could argue that founding families prefer relatively high debt to equity ratios as equity dilutes their control over the firm. However prior researchers (e.g., DeAngelo and DeAngelo 1985), show that founding families use a range of control-enhancing mechanisms (e.g., voting rights, pyramids, cross-holdings) designed to give the family control rights in excess of their cash-flow rights. In light of these mechanisms, I do not expect founding families 'control to be diluted significantly by raising equity. Thus, given founding families' concerns with using debt highlighted earlier, I expect family firms to have relatively low debt to equity ratios.

citizenship levels versus non-family firms i.e., more employee-related strengths and fewer employee-related weaknesses.[18]While I expect a strong emphasis on employee-related corporate citizenship to be a general characteristic of family firms, I also expect family firms' employee-related corporate citizenship levels to be *particularly* superior versus non-family firms during recessions.

I expect a strong emphasis on employee-related citizenship to be a general characteristic of family firms because of two reasons. First, founding families tend to view their firms as their identity, or self-view (Dyer 1992; Schein 1983). As most people have positive self-views (Diener and Diener 1995), one would expect founding families to place a strong emphasis on ensuring that their firm treats its employees ethically. Furthermore, with founding families' personal reputation closely inter-related with that of their firms (Dyer and Whetten 2006), loss in a firm's reputation is especially onerous to the firm's founding families. This realization is expected to make founding families especially concerned about their employees' welfare.

Second, founding families are particularly concerned about the long-term survival of their firms (Casson 1999). The survival of family firms depends to a large extent on whether founding families can inculcate a long-term commitment in their employees, which in turn necessitates that family firms have a strong emphasis on treating employees ethically. In the words of Lansberg (1999), it is critical for family firms' long-term continuity to inculcate in its employees a ''shared dream,'' — a high level of identification with the founders' survival goals, and strong loyalty towards the firm. Prior research (e.g., Maignan, Ferrell, and Hult 1999) shows that employees have greater identification with and loyalty towards their firm, when their firm treats them ethically. Hence, as employees' commitment towards the firm is *critically* important for

[18] The way strengths and weaknesses have been defined by KLD, it is not necessary that firms that have more strengths also have fewer weaknesses. In fact as Table 3.2 shows there is typically a positive correlation between strengths and weaknesses. One reason for this is that larger firms, given their greater resources have more such strengths as strong employee retirement plans but their greater scale of operations also makes them more vulnerable to such weaknesses as employee-related litigation.

founding families, I expect these families to be particularly eager to ensure the quality of their firms' workplace experiences both prior to and during recessions.

I expect family firms' employee-related corporate citizenship levels to be *particularly* superior to non-family firms' during recessions given founding families' long-term commitment to their firms. During recessions, managers are under pressure to improve their firms' accounting-based profitability by scaling back healthcare coverage or decreasing retirement benefits. Given founding families' long-term orientation, I expect family firms to be less likely than non-family firms to cut back on such employee-related initiatives during recessions. Similarly, family firms are expected to have lower workforce reductions (an employee-related concern) during recessions, when the pressure to downsize is accentuated. As explained later, significant workforce reductions during recessions, given their long-term costs such as loss of knowledge capital, hurt firms' long-term profitability (Budros, 1999; Nixon et al., 2004). I therefore expect founding families, given their motivation to protect the long-term health of their firm, to resist significantly reducing their firms' workforce during recessions:

H3a. Family firms are likely to have more employee-related strengths than non-family firms during recessions.

H3b. Family firms are likely to have fewer employee-related weaknesses than non-family firms during recessions.

Behavior related to Social Capital: Social Strengths and Weaknesses

I also expect family firms to have higher corporate citizenship levels with respect to customers and society in general. While I expect a strong emphasis on social responsibility to be a general characteristic of family firms, I expect family firms' social responsibility levels to be *particularly* superior versus non-family firms during recessions.

I expect a strong emphasis on social responsibility to be a general characteristic of family firms for reasons similar to the ones highlighted earlier. First, prior research (e.g., Kets de Vries 1993) reveals that founding families' self identities are inextricably tied to their firms. Family owners, therefore tend to place a strong importance on a number of noneconomic personal benefits that Gomez-Mejia et al. (2007) collectively define as 'socioemotional wealth'. These benefits include projecting a positive family image (Sharma and Manikutty 2005), receiving recognition for philanthropic actions (Schulze, Lubatkin, and Dino 2003), enjoying goodwill in the community (Taguiri and Davis 1996), and accumulating 'social capital' (Arregle et al. 2007). Second, for family firms, the face of the family mirrors that of the firm (Reiss 1981). Hence, any easily observable social controversy that a family firm gets involved in tarnishes the image of its founding family (Gersick et al. 1997). I would therefore expect family firms to display a strong emphasis on corporate citizenship behavior with respect to customers and society in general, both prior to as well as during recessions.

I expect family firms' social corporate citizenship levels to be *particularly* superior to non-family firms during recessions. This is because, given founding families' long-term vision and uninterrupted commitment to their firms, it is likely that they will continue investing in social responsibility initiatives, whose economic benefits are more distant in nature. The benefits of taking part in positive social initiatives such as environmental preservation programs are not immediately obvious. On the contrary, an increase in such initiatives, to the extent that it adds to the firms' costs, may even decrease firms' short-term accounting-based performance. Non-family firms' managers, given their shorter tenure and lower commitment to their firms, are therefore expected to be more myopic, and not expected to emphasize social responsibility

initiatives as much as managers of family-firms, particularly during recessions when there is more pressure to cut discretionary expenditures. Hence:

H4a. Family firms are likely to have more social strengths than non-family firms during recessions.

H4b. Family firms are likely to have fewer social weaknesses than non-family firms during recessions.

Consequences of Family Presence

In this study, I restrict myself to exploring differences in family and non-family firms' market-based performance, using Tobin's *q* as my measure of performance. I expect family and non-family firms' unique behavior during recessions to have a significant impact on their *future* revenue generation potential. For example, decrease in a firm's advertising intensity during a recession year may or may not translate into a drop in the firm's net income during the current year, but is nevertheless expected to decrease the firm's brand equity and therefore the net present value of its expected future cash flows. I therefore found a forward-looking, financial market-based performance measure such as Tobin's *q* to be more appropriate in my context as compared to a backward-looking, accounting-based measure of performance such as ROE or ROA. Other advantages of using Tobin's *q* are that Tobin's *q* takes into account firm risk, and is comparable across industries, unlike accounting-based performance metrics such as ROE which depend on different industries' tax laws and accounting conventions (Montgomery and Wernerfelt 1988). With Tobin's *q* as my measure of firm performance, I now explain why I expect family firms to outperform non-family firms during recessions.

First, exhibiting relatively high levels of advertising intensity during recessions is expected to help family firms perform better than non-family firms. I base this expectation on two reasons namely: (1) a possibly greater return on investment from advertising during recessions given

generally low levels of advertising expenditure by competitors, and (2) a decline in brand equity of non-family firms because of a significant decline in their advertising.

Most firms tend to cut back on advertising during recessions, a 1 percent drop in GDP resulting in a 1.4 percent drop on average in advertising expenditures across 37 countries during the years 1980 to 2005 (Deleersnyder et al. 2009). In an environment of reduced advertising, there is less media clutter, possibly increasing the advertising effectiveness of any single firm that advertises proactively (Srinivasan, Rangaswamy, and Lilien 2005). Indeed, Steenkamp and Fang (2011) find that increasing advertising share during recessions has a more positive effect on profit and market share than increasing advertising share during economic expansions. Investors may therefore reward family firms, taking into account the likely impact of their superior advertising on their profit and market share. Second, prior research also shows that advertising increases a firm's salience with individual investors, and that investors typically prefer holding stocks that are well known or familiar to them (Frieder and Subrahmanyam 2005; Grullon, Kantas, and Kumar 2004). Family firms' superior advertising intensity during recessions is also expected to make them more salient in the minds of investors, in turn driving up their market performance.

Furthermore, brand equity is a relational market-based asset that helps increase firms' shareholder value (Srivastava, Shervani, and Fahey 1998), as strong brands command higher revenue relative to generic unbranded products with identical physical features (Ailawadi, Lehmann, and Neslin 2003). Brand equity depends to a large extent on sustained level of advertising across a long period of time (Mela, Gupta, and Lehmann 1997; Miller, Mathisen, and McAllister 2005). A greater decrease in investments towards maintaining this market-based asset during recessions is therefore expected to decrease the brand equity of non-family firms.

Investors react strongly to decreases in brand equity (Aaker and Jacobson 2001; Mizik and Jacobson 2007), given that a decrease in brand equity is expected to decrease the net present value of the firm's future cash flows. I therefore expect non-family firms' lower advertising intensity during recessions to translate into lower market performance.

Second, I expect family firms' lower debt ratio to also help them outperform non-family firms during recessions. Admittedly, having debt as part of one's capital structure has some advantages (e.g., tax shields). However, higher levels of debt are associated with higher levels of default risk, a risk which is particularly meaningful to investors during recessions. Higher financial leverage also leads to higher corporate risk and therefore higher costs of borrowing (e.g., Kiyotaki and Moore 1997). Furthermore, a high debt ratio may constrain firms from making such long-term investments as advertising which are useful in building such market-based assets as brand capital. Finally, prior researchers (e.g., Lamey et al. 2007) have found that for many product categories, firms that have charged lower prices during recessions (subsequently raising their prices post-recession), have increased their long-term market share. Such a pricing strategy allows these firms to attract new price-sensitive customers, many of these customers remaining locked-in post-recession. Highly leveraged firms, given their greater financial constraints, are in a relatively weaker position to bear the short term cost of such price discounts. All in all, during recessions, I expect investors to become more sensitive to bankruptcy threat, penalizing non-family firms for their higher financial leverage.

Third, family firms, if they indeed have relatively more employee-related positive initiatives and relatively fewer employee-related weaknesses, are also expected to have relatively higher levels of employee commitment and loyalty; these higher levels of commitment and loyalty are in turn expected to help boost family firms' market performance during recessions. Prior studies

on downsizing (an employee concern) also show that firms tend to downsize more than the optimal amount and this hurts their market performance (e.g., Budros 1999; Nixon et al. 2004). This is because workforce reductions lead to loss of knowledge capital, decreased employee morale, reduced firm commitment, loss of employee trust, increased interpersonal conflict, and loss of forward thinking (Cameron 1997), factors which in turn decrease firm performance.

Finally, I expect family firms' fewer social transgressions and more positive social initiatives during recessions to also boost their performance. Prior research has shown that social transgressions decrease customer satisfaction (Rhee and Haunschild 2006). Hence firms that avoid such transgressions may avoid customer penalties, improving their performance versus firms that get involved in such transgressions. Researchers have also shown that firms' level of positive social initiatives is positively related to their brand responses (Brown 1998), brand evaluations (Berens, van Riel, and van Bruggen 2005), customer satisfaction (Luo and Bhattacharya, 2006), customer loyalty, customer advocacy behaviors (Du, Bhattacharya, and Sen 2007), and revenue growth (Lev, Petrovits, and Radhakrishnan 2010). Improved customer satisfaction has in turn been shown to improve firms' Tobin's *q* (Luo and Bhattacharya 2006). Some researchers (e.g., McGuire, Sundgren, and Schneeweis 1988), have found no link between positive social initiatives and firm performance. All in all, however, I conjecture both more social strengths and fewer social weaknesses to mediate family firms' superior market performance:

H5. Family firms perform better than non-family firms during recessions.

H6. Family firms' superior performance versus non-family firms during recession years is mediated by (a) their higher advertising intensity, (b) their lower debt-to-equity ratio, (c) their more employee-related strengths, (d) their fewer employee-related weaknesses, (e) their more social strengths, and (f) their fewer social weaknesses.

METHODOLOGY

Sample

My sample consisted of 428 large publicly listed U.S. firms, whose performance was tracked across 7 recession years between 1970 and 2008. Following Frankenberger and Graham (2003), and Srinivasan, Lilien, and Sridhar (2011), I classified a calendar year as a recessionary year if according to the National Bureau of Economic Research (NBER), more than six of its months occurred during a recession period. This led us to classify 7 calendar years as recession years: 1970, 1974, 1980, 1982, 1990, 2001, and 2008. I used three studies to reach my sample of firms: I began with the list used by Anderson and Reeb (2003) of S&P 500 firms in 1992. I supplemented this with a BusinessWeek survey that tracked the financial performance of S&P 500 family firms from 1993-2002 (BusinessWeek, Nov 10, 2003, p.111) and a 2003 survey published by Family Business Magazine, (http://www.familybusinessmagazine.com), listing the largest 150 family firms in the U.S. I restricted myself to publicly listed firms that did not change from being family firms to being non-family firms or vice-versa across the 7 recessions. All in all, I had 428 firms (193 family and 235 non-family) belonging to a diverse set of industries, representing 56 different 2-digit SIC codes and 8 different 1-digit SIC codes.

Data Sources and Measures

Data were collected annually for the 7 recession years, COMPUSTAT, CRSP, company annual reports, and proxy statements being the main sources of data. Family firm was the focal independent variable in my analysis, taking the value of 1 for family firms (as per the Anderson and Reeb (2003) definition of family firms given earlier) and 0 for non-family firms.

Models of differences in advertising intensity between family firms and non-family firms.

Here, advertising intensity (i.e., ratio of advertising expenditure to assets), served as the dependent variable[19], family firm was the key independent variable, while firm size (natural log of assets), firm age (natural log of number of years since firm inception), globalization (proportion of firm revenues from outside the U.S.), diversification (Palepu (1985)'s entropy measure of total diversification), prior firm performance (Tobin's *q* in time t-1), debt ratio (total liabilities divided by shareholders' equity), and 55 SIC-2-digit dummies served as controls.[20] I controlled for globalization and diversification as more global and more diverse firms, given the need to customize advertising to different countries' or different industries' unique consumer needs, may be expected to have higher advertising intensities. Similarly, firms with a high debt ratio, given their lower financial flexibility, may have less cash flow left for advertising. Finally, I controlled for prior performance to account for the possibility that advertising investments are an outcome of poor or superior prior performance.

Models of differences in debt ratio between family firms and non-family firms.

Here, debt ratio (measured as total liabilities divided by shareholders' equity), served as the dependent variable. I included 55 SIC-2-digit dummies, as manufacturing industries have more tangible assets that can pass easily through bankruptcy and are therefore likely to use more debt than more labor intensive industries (Brealey and Meyers 2003). Similarly, I controlled for R&D intensity (R&D expenditure divided by total assets) as firms with higher R&D

[19] Following Villalonga (2004) I inserted zeros when firms did not report Advertising or R&D expenditures. However, it is possible that family and non-family firms differ in their likelihood to report these expenditures, and that this likelihood is in turn related to my dependent variables. To address this concern, following Villalonga (2004), in separate robustness check, I included two dummy variables which took the value of 1 if advertising or R&D values were missing respectively prior to inserting zeros. Neither of these dummy variables was significant in my models, nor did my overall results change after I included these dummies, addressing the possible omitted variable bias concern.

[20] The earliest year in COMPUSTAT segment, from which I obtained globalization and diversification data is 1976. Hence, for the year 1970 and 1972 I used firms' globalization and diversification values in the closest recorded year (1976) as proxies for their globalization and diversification values in 1970 and 1972. Dropping globalization and globalization from my models, or keeping globalization and diversification in my models but dropping all observations in the year 1970 and 1972 made no difference to my overall conclusions.

expenditures, given their more specialized equipment that do not easily pass through bankruptcy, are likely to have lower debt ratios (Brealey and Meyers 2003). I controlled for firm size and age as smaller and younger firms incur higher costs of issuing debt since they are subject to asymmetric information problems and default risk (Booth et al. 2001; Fama and French 2002). I also controlled for prior firm performance, diversification, and globalization.

Models of corporate citizenship: social and employee-related strengths and weaknesses.

I measured social and employee-related corporate citizenship using data from Kinder, Lydenberg and Domini Research & Analytics (KLD). As discussed in the first two essays of this dissertation, KLD reports firms' corporate citizenship in seven categories from the year 1991 onwards: employee relations, product issues, corporate governance, diversity, adherence to human rights, and environmental performance. For each of these seven categories, for a particular year, KLD reports a firm's strengths and weaknesses. A firm is given a 0 for strengths in the environment category, for example, if the firm took part in no environment related positive initiative in that year; otherwise, KLD assigns the firm a number, based on the number of environment-related subcategories in which the firm took part in a positive initiative. Similarly, a firm not acting irresponsibly in a particular category receives a 0 for weaknesses in that category ; otherwise, KLD gives the firm a count rating based on the number of subcategories in which the firm acted irresponsibly. Thus, the higher a firm's strengths and the lower a firm's weaknesses, the higher the corporate citizenship level of the firm. I considered two categories to reflect firms' relationships with its employees (diversity and employees). This is in line with recent research which considers these two categories to be distinct from the remaining five, and especially meaningful for measuring firms' corporate citizenship with reference to its employees (e.g., Bauer, Derwall, and Hann 2009; Chiu and Sharfman 2011). The indicators in these two

categories also correspond with previous studies exploring the link between employment practices and organizational performance (e.g., Ichniowski and Shaw 1999). I considered the remaining five categories (community, product, environment, corporate governance and human rights) to reflect firms' relationships with other stakeholders — customers, investors and society at large. For each firm and for each recession year for which KLD data were available (2001 and 2008), (1) I aggregated the scores from each of the two employee-related categories (diversity and employees) to create a single 'employee strengths' score, and a single 'employee weaknesses' score, and (2) I aggregated the scores of each of the remaining five categories to create a single 'social strengths' and a single 'social weaknesses' score. For both employee-related and social corporate citizenship, I first used strengths and then weaknesses as the dependent variable in my regression.[21] I controlled for firm size, firm age, prior performance, globalization and diversification. Firm size was controlled because larger firms may have more financial slack but may also be more bureaucratic, making them more or less likely to invest in positive CSR initiatives. Similarly, larger firms and more globalized firms, because of their greater scope of operations, may be more likely to get involved in negative social activities. I controlled for firm age to account for any cultural differences between old and new firms that may be correlated with the firm's level of corporate citizenship. I controlled for prior performance as current corporate citizenship could be an outcome of firms' prior performance. Finally with corporate citizenship levels different for different industries, I controlled for industry characteristics via 7 SIC-1-digit industry dummies.[22]

[21] Another option was to measure citizenship by subtracting the weaknesses from the strengths to reach a net strengths score. However, I chose not to use this option as it assumes that firms with high scores on both strengths and weaknesses are similar to firms with low scores on both strengths and weaknesses. Furthermore, aggregating strengths and weaknesses, does not allow us to understand the differential impact of strengths and weaknesses on firm performance.

[22] I report results using 7 SIC-1-digit industry dummies rather than 55 SIC-2-digit as the significantly lower number of observations in the sub-sample of 2 recession years as compared to the full sample of 7 recession years (685 instead of 2317) meant using 55 SIC-2-digit dummies could create a presumption that the model was over-fit (Stevens 2009). Nevertheless, I did not find any significant changes to my overall conclusion on using 55 SIC-2-digit dummies.

Models of firm performance: Dependent variable and controls.

I used Tobin's *q* as my measure of firm performance, calculating Tobin's *q* by applying Chung and Pruitt's (1994) approximation, namely, the ratio of the sum of market value of the firm and book value of its debt to its total assets.[23] Besides including my proposed mediators, I controlled for prior performance, firm size, firm age, diversification, globalization and R&D intensity; prior research has shown that these variables can affect firm performance (e.g., Nath and Mahajan 2008).

ANALYSIS AND RESULTS

Table 4.1 presents results of differences in means tests between family firms and non-family firms first during pre-recession years (i.e., one year preceding recession years) and then during recession years. Including pre-recession years allowed us to get a more fine-grained understanding of changes in firms' strategic behavior and performance as they enter recessions.

As data on social and employee-related corporate citizenship were only available for the last two recessions (2001 and 2008), I analyzed differences in family and non-family firms' social and employee-related citizenship levels based on the sub-sample of the last two recessions.

This univariate analysis provides initial evidence that family firms enter recessions already having higher Tobin's *q*, higher advertising intensity, lower debt to equity ratio, fewer social weaknesses and fewer employee weaknesses than non-family firms. Contrary to expectations, however, Table 4.1 also suggests that family firms enter recessions having marginally fewer employee-related strengths ($p < .10$) and fewer social strengths versus non-family firms.

[23] The formula for calculating Tobin's *q* according to the Chung and Pruitt (1994) is: (share price at end of calendar year * number of common stock outstanding at end of calendar year+ liquidating value of the firm's preferred stock + current liabilities – current assets + book value of long-term debt)/book value of total assets. Tobin's *q* is calculated at the end of the calendar year while advertising and other expenditures take place prior to and up till the end of the calendar year. Hence, my model featuring Tobin's *q* as the dependent variable does not face the issue of reverse causality.

Family firms' performance superiority vs. non-family firms grows further during recession years. This is because while both family and non-family firms experience a drop in their Tobin's *q* during recessions, the drop in family firms' Tobin's *q* during recession is significantly lower than the drop in non-family firms' Tobin's *q* (-.11 vs. -.32, $p < .05$ in the full sample, and -.27 vs. -.47, $p < .05$ in the sub-sample). Furthermore, family firms' advertising intensity superiority versus non-family firms grows further during recessions, because family firms tend to cut back on advertising to a lesser extent than do family firms (+.001 vs. -.002, $p < .01$ in the full sample and +.002 vs. -.004, $p < .01$ in the sub-sample). Family firms also maintain their number of social and employee related weaknesses, going from pre-recession to recession periods, while the corresponding numbers for non-family firms increase significantly, leading to an increased gap between family and non-family firms' number of weaknesses during recessions.

Next, I analyzed if differences between family and non-family firms during recessions remain robust to multivariate analysis. Table 4.2 presents descriptive statistics and correlations for all measures, pooled over the period of observation. For all models discussed, the variance inflation factors were much smaller than the benchmark of 10, and condition indices associated with the eigenvalues much smaller than the benchmark of 30. Furthermore, except for the correlation between firm size and social weaknesses (.57) none of the other correlations between independent variables exceeded .50. Thus, all in all, my tests do not suggest significant multicollinearity problems (Kennedy 2003). I address later the possible multi-collinearity problem caused by having firm size and social weaknesses together as independent variables.

Analysis of differences in advertising intensity.

I used random[24] effects GLS regression, the results of which are shown in Table 4.3. In Model 1, I restricted myself to observations during recession years. In Models 2a and Models 2b, I included observations of both recession and pre-recession years, adding a dummy variable called recession which took the value of 1 during recession years and 0 during pre-recession years.

I found support for H1, the coefficient of family firms being positive and significant in Model 1 ($p < .01$). Hence, family firms tend to have relatively higher advertising intensity during recessions compared to non-family firms. I also found that smaller firms ($p < .01$), older firms ($p < .10$), and firms with higher levels of globalization ($p < .10$), are likely to have higher advertising intensities. Model 2a reveals that family firms enter recessions already having higher advertising intensity, the coefficient of family firms being positive and significant ($p < .01$). During recessions, non-family firms decrease their advertising intensity, the coefficient of recession being negative and significant ($p < .01$). Family firms however do not decrease their advertising intensity during recessions as much as do non-family firms, the interaction effect of family firms and recession being positive and marginally significant ($p < .10$). In Model 2b, a more parsimonious model, whose fit was not significantly different from Model 2a, I dropped the non-significant variables of Model 2a, and found a more significant ($p < .05$) positive interaction effect of family firms and recession. Thus, family firms enter recessions already exhibiting higher advertising intensities as compared to non-family firms, and their advertising superiority versus non-family firms grows further during recessions.

[24] Because my focal independent variable (family firm) was time-invariant, fixed effects could not be estimated, as one would need to drop the family firm variable itself. Nevertheless, for each of the random effects models used in this study, I carried out a Hausman test, and failed to reject the null hypothesis that random effects are consistent and efficient. Table 4.3 presents results of one such test.

Analysis of differences in debt to equity ratios.

I again used random effects GLS regression, the results of which are shown in Table 4.4. As Table 4.4 shows, I found support for H2, the coefficient of family firm being negative and significant ($p < .01$) in Model 1. Thus, family firms are likely to have a lower debt ratio compared to non-family firms during recessions. Smaller firms ($p < .01$), firms with higher R&D intensity ($p < .10$), higher prior performance ($p < .01$), and higher diversification ($p < .05$), were also found to have lower debt ratios during recessions. The coefficient of family firms in Model 2 was negative and significant, while that of recession and the interaction term between recession and family firms were non-significant. Thus, family firms enter recessions with lower debt ratios, and maintain their lower financial leverage during recessions.

Analysis of social and employee-related corporate citizenship.

I used separately, total strengths and total weaknesses as the dependent variable in my analysis for both social and employee-related corporate citizenship. In each case, because the dependent variable was a count variable, I used a negative binomial regression, results of which are shown in Table 4.5.

As Table 4.5, Models 1 and 3 reveal, contrary to H3a and H4a, I found no significant difference between family and non-family firms in their social and employee strengths during recessions. However, as Table 4.5 Models 2 and 4 reveal, I did find support for H3b and H4b. The coefficient of family firm in Model 2 with social weaknesses as the dependent variable was -.31 ($p < .01$), while the coefficient of family firm in Model 4, with employee weaknesses as the dependent variable was -.23 ($p < .05$). Thus, family firms are likely to get involved in fewer social and employee-related unethical actions during recessions. Among the controls, larger firms were likely to take part in more positive social and employee-related initiatives but also to

get involved in more weaknesses. More globalized firms were also found to have more social strengths as well as more social weaknesses.

Models 5 and 7 of Table 4.5 reveal no significant difference between family and non-family firms' citizenship strengths in pre-recession years. Models 6 and 8, nevertheless, show that family firms enter recessions having significantly fewer social weaknesses than non-family firms. However, while non-family firms' social and employee-related weaknesses increase significantly during recessions (as shown by the positive and significant coefficient of recession in Models 6 and 8), family firms' increase in weaknesses during recessions is significantly less than that of non-family firms (as shown by the negative and significant interaction of family firms with recession in Models 6 and 8). Hence, family firms exhibit fewer social and employee-related weaknesses during recessions relative to non-family firms, and this is partially driven by family firms' weaknesses not increasing as much as non-family firms' during recessions.

Analysis of firm performance.

To model the relationship between family firms and firm performance during recessions, I used an OLS regression with industry fixed effects, using Huber White sandwich robust (clustered by firm) variance to account for hetroscedasticity and serial correlation. I also used a GLS random effects regression, with my results (available upon request) remaining robust to this alternate specification. I tested for mediation effects by applying the standard Baron and Kenny (1986) approach. According to this approach, a variable functions as a mediator when variations in the independent variable (i.e., family firm) significantly account for variations in the proposed mediator (i.e., advertising intensity, debt ratio, or social or employee-related weaknesses); when variations in the mediator significantly account for variations in the dependent variable (i.e., Tobin's *q*); and controlling for the mediator, when a previously significant relationship between

the independent variable and the dependent variable decreases or becomes insignificant. Results of this approach appear in Table 4.6, the key takeaways being:

(1) Family firms perform better than non-family firms during recessions. In Model 1 I used all control variables mentioned earlier except prior Tobin's *q*. I later added prior Tobin's *q* (Model 3). I repeated this procedure on the sub-sample (Models 5 and 7). In all these models, where the proposed mediators were absent, family firm had a positive and significant relation ($p < .05$) with Tobin's *q*, supporting H5. (2) Family firms' advertising intensity and debt ratio partially mediate their superior performance during recessions. When I added Ad intensity and debt ratio to my models in the full sample (e.g., Model 2), advertising intensity (1.22, $p < .05$) and debt ratio (-.083, $p < .01$) were positively and negatively related to firm performance respectively. Also, the magnitude of family firm's coefficient dropped (.22 vs. .28), indicating partial mediation. Similar results were obtained when I added Ad intensity and debt ratio after having controlled for firms' prior Tobin's *q* (Model 4). The coefficient of family firm became smaller on adding Ad intensity and debt ratio, with advertising intensity (.76, $p < .05$) and debt ratio (-.026, $p < .01$), being positively and negatively related to firm performance respectively. I also found similar results for the sub-sample: Ad intensity and debt ratio were positively and negatively related to firm performance respectively and their addition was simultaneously associated with a drop in the coefficient of family firm. (3) Family firm' fewer social weaknesses and fewer employee-related weaknesses, partially mediate their superior performance during recessions. In addition to finding earlier in Table 4.5 that family firms have fewer social weaknesses and employee weaknesses, I found in Table 4.6 that both social weaknesses and employee weaknesses had a negative relation with Tobin's *q* (Model 6 and Model 8), and the addition of these proposed mediators was associated with a drop in coefficients of family firm (supporting H6d and H6f). In

separate unreported analysis, I dropped firm size, given the possible multi-collinearity issue arising from having social weaknesses and firm size together as predictor variables and found the negative coefficient of social weaknesses become even more significant ($p < .05$ in the models that include prior Tobin's *q*). H6c and H6e were not supported, however, as there were no significant differences between family and non-family firms' employee and social strengths to begin with (Table 4.5). I also tested multiple mediation using a structural equation modeling (SEM) approach proposed by Preacher and Hayes (2008) (details provided in Table 4.10). As shown in the Table 4.10, I reached the same conclusion on using this approach: family firms perform better than non-family firms during recessions, their superior performance mediated by their higher advertising intensity, lower debt ratio and fewer social and employee-related weaknesses.

To get a more comprehensive picture of how firms' performance changes from pre-recession to recession years, I also ran an OLS regression of Tobin's *q* in pre-recession years on family firms and the proposed mediators. Results of this analysis are shown in Table 4.7.

All in all, I found that family firms perform better than non-family firms even prior to recessions. However, this performance superiority of family firms is significantly smaller in pre-recession years as compared to recession years (e.g., the coefficient of family firm is .13 in Table 4.7 Model 1 versus .28 in Table 4.6 Model 1), and is only significant at the 0.1 significance level. This marginal superiority of family firms in pre-recession years is mediated by these firms' higher advertising intensity and fewer social weaknesses. Comparing the coefficients in Model 2 of Table 4.7 to the coefficients in Model 2 of Table 4.6, and comparing the coefficients in Model 4 of Table 4.7 to the coefficients in Model 6 of Table 4.6, I found that the coefficients of advertising intensity, social weaknesses and employee weaknesses were not statistically different

in pre-recession and recession years (i.e., 95% confidence intervals of the coefficients in pre-recession years included the respective coefficients in recession years). This information, combined with the changes in the levels of these mediators found in Table 4.1 reveal that while advertising intensity continues to be have the same positive effect on firm performance both prior to recessions and during recessions, non-family firms cut back on their advertising intensity significantly more than do family firms, helping family firms increase their performance superiority over non-family firms. Similarly, while social weaknesses and employee weaknesses continue to have statistically the same negative effect on firm performance prior to recessions as they do during recessions, non-family firms' social and employee-related weaknesses increase more dramatically during recessions as compared to family firms, helping family firms increase their performance superiority versus non-family firms during recessions. There is a significant difference in the coefficient of debt ratio prior to recession and during recession, however, with the coefficient of debt ratio being insignificant in pre-recession years (Model 2 and Model 4 of Table 4.7) but significant during recessions (Model 2 and Model 6 of Table 4.6). Thus family firms' lower leverage versus non-family firms only seems to help their value during recessions. I conjecture that this is driven by the fact that during recession, when the average threat of bankruptcy of all firms rises, investors become more sensitive to firms' debt ratios.

Three additional questions that can be raised warrant one's attention. First, one could question whether the positive relation between family firms and Tobin's q holds if family firm is treated as a continuous variable (based on the percent ownership of the family in the firm). Second, one could challenge the exogeneity assumption of family ownership: Do founding families sell their shares if they expect their firm's performance during recessions to be poor? Third, are the differences between family and non-family firms' performance during recessions

driven primarily by those family firms in which the founding family takes an active role in the firm's management (e.g., when the firm's founder is the CEO)?

To address the first question, I repeated the analysis of family firms' relation with firm performance, modeling family firm as a continuous variable based on the level of family ownership. Following Villalonga and Amit (2006), I studied firms' proxy statements measuring family ownership as the percentage of shares of all classes held by members of the founding family. As SEC filings were only available for the last two recessions, I limited my analysis to the years 2001 and 2008. Results of this approach are shown in Table 4.8, Models 1–2.

To address the second question, I used an instrumental variable two-stage least square regression; I first predicted the value of family ownership and then used this predicted value as an independent variable. Demsetz and Lehn (1985) argue that ownership is a function of firm size and risk. Accordingly, I modeled family ownership using the natural log of firm assets, the square of the natural log of firm assets, and the volatility of the monthly stock returns as instruments. Prior researchers (e.g., Anderson and Reeb 2003; Himmelberg, Hubbard, and Palia 1999) studying firm ownership's link to performance have also used these instruments, showing them to be strong and exogenous. Table 4.8, Models 3-4 shows results of the second stage.

As Table 4.8 shows, the conclusion that family firms perform better than non-family firms during recessions remains robust to the treatment of 'family firm' as a continuous variable and to the treatment of family ownership as an endogenous variable. The coefficient of family ownership is positive and significant in Model 1 ($p < .01$) while in addition to the coefficient of family ownership being positive and significant in Model 2 ($p < .01$), the coefficient of the square of family ownership is negative and significant ($p < .01$). The inflection point comes at 29.2% ownership which is higher than the ownership level for most family firms in my sample

(mean 7.0%, standard deviation 13.4%). This suggests that while on the whole an increase in family ownership improves firm performance during recessions, this relationship is non-linear. In Model 3, the coefficient of predicted family ownership is positive and significant ($p < .01$), Thus family firms perform better than non-family firms during recessions even after addressing potential endogeneity concerns. In Model 4, further support for the mediation effects found earlier is found. The coefficient of predicted family ownership decreases in magnitude (from 9.44 to 6.17) going from Model 3 to Model 4, after the addition of the proposed mediators. Furthermore, advertising is found to be positively related to Tobin's *q*, while debt ratio, social weaknesses and employee weaknesses are found to be negatively related to Tobin's *q*.

To answer the question regarding the impact of the degree of family involvement on firm performance during recessions, I ran additional OLS regression models shown in Table 4.9.

I studied firms' annual reports and used dummy variables for *CEO founder*, *CEO descendant* and *CEO outsider*, which took the values of 1, if a family firm's CEO during the recession year was the firms' founder, the founder's descendant or an outsider respectively (Model 1). I limited this analysis to the last two recessions, given annual reports of prior recessions were not publicly available. The intercept in Model 1 represented non-family firms. Similarly, in Model 2, I used dummy variables for *Chairman founder*, *Chairman descendant*, and *Chairman outsider,* which took the value of 1 if a family firm's executive chairman, was the firm's founder, the founder's descendant or an outsider respectively. Again, the intercept in this model represented non-family firms. Finally in Model 3, I used dummy variables for *Chairman and CEO family*, *Chairman or CEO family*, and *Chairman and CEO outsider*. In the first case, both the chairman and CEO of the firm belonged to the family (either founder or descendant). In the second case, either the chairman or the CEO (but not both) belonged to the family. In the

third case, both the chairman and CEO of the family firm were outsiders. Just like in Models 1 and 2, the intercept in Model 3 represented non-family-firms. In Model 1, I found that *CEO founder*, *CEO descendent*, and *CEO hire* were all positively associated with Tobin's *q*, with the coefficient of *CEO founder* larger than the remaining two. In Model 2, the coefficient of *Chairman outsider* was non-significant, while the two dummies representing family Chairmen were positive and significant. Again the coefficient of *Chairman founder* was higher than the remaining two. Finally in Model 3, the coefficient of *Chairman and CEO outsider* was non-significant while the coefficient of the other two dummies were significant and positive. All in all, my results suggest that the differential impact of family firm ownership on firm performance during recessions is driven by firms where a founding family member was actively involved in the firm's management, this being especially true, if the founder was involved in the management. Those family firms, where the founding family had passive management involvement (i.e., where both the CEO and the Chairman were outsiders), performed no differently versus non-family firms. This result is in line with prior research which suggests that founders bring unique skills and attributes to the firm (e.g., Morck, Shleifer, and Vishny 1988). This result is also in line with my arguments about the family's concern for reputation: families with passive management control may not be in a position to influence their firms' behavior and in turn its performance, even when they may have a long-term investment horizon and be concerned about their reputation.

DISCUSSION AND IMPLICATIONS

The purpose of this essay was to address the following two questions: (1) Do family firms perform better than non-family firms during recessions? (2) If so, what unique strategic behavior manifested by family firms mediate these firms' superior performance during

recessions? I found that family firms do outperform non-family firms during recessions and this is mediated by family firms' greater advertising intensity, lower financial leverage, and higher social and employee-related corporate citizenship levels. Differences in these strategic factors are a result of a more long-term approach towards investments in market-based assets with family firms being more reluctant to cut back on advertising during recessions and more eager to ensure they maintain high levels of social and employee-related citizenship standards.

This essay challenges the perception of family ownership being an ineffective organizational form. I find that not only do family firms perform marginally better than non-family firms prior to recessions (complementing prior research e.g., Anderson and Reeb 2003 which was focused on pre-recession years), their more consistent investments in market-based assets helps further extend their performance superiority during recessions. Thus this study helps develop a more comprehensive understanding of the link between family ownership and firm performance.

Second, I go beyond investigating the overall relationship between family ownership and firm performance by highlighting the unique behavior of family firms which mediates their performance superiority. A few researchers have argued, without providing empirical support that family firm ownership offers certain advantages. Demsetz and Lehn (1985) for example note that combining ownership and control can be advantageous as large shareholders can act to mitigate managerial expropriation. Others have argued that founders bring specialized knowledge to their firm (Anderson and Reeb 2003). I do not discount these advantages of family firms, especially when my proposed mediators only partially mediate family firms' superior performance. Nevertheless, I empirically establish another aspect of family ownership especially advantageous to firms during recessions: the extended investment horizon of founding families

helps mitigate the incentives for myopic management. Third, prior research on corporate citizenship (e.g., Brammer and Millington 2008; Luo and Bhattacharya 2006; Du et al., 2007), has focused primarily on the consequences, not the antecedents of CSR. I extend this literature stream by suggesting that the degree to which firms' reputation is related to owners' reputation may influence firms' corporate citizenship-related decisions. I also extend prior research on the consequences of CSR, by demonstrating that both social and employee-related weaknesses hurt firms in times of recessions, and hence it helps firms to continue to avoid such weaknesses. Furthermore, I provide a more nuanced understanding of the consequences of corporate citizenship by finding that while not taking part in social and employee-related initiatives does not hurt firms during recessions (perhaps because the firms' stakeholders understand the firms' financial constraints during recessions), firms *are* penalized during recessions for irresponsible social and employee-related actions. Thus, I encourage a more fine-grained measurement of CSR, incorporating both strengths and weaknesses, in future CSR-related studies.

My results also have important implications for managers, investors, employees and advertising agencies. To managers, I reveal the negative consequences of cutting back on advertising, and becoming complacent on employee and social weaknesses during recessions. Non-family firms' managers can implement family firms' strategies (high advertising intensity, conservative debt structure, and high employee and social citizenship standards) to also improve their firms' performance during recessions. To investors, I highlight that during recessions when most firms lost value, U.S. family firms can be relatively safer investment options given that over the past 7 recessions in the U.S., their unique strategies have helped them minimize the decrease in their Tobin's *q*. My results are also meaningful to prospective employees. Given family firms' fewer employee weaknesses during recessions, whether a firm is a family firm may

be an important criterion prospective employees may like to consider. Furthermore, given that a consistently high advertising intensity reflects a more central role of marketing in a firm (Nath and Mahajan 2008), my results suggest a more active role of marketing in family firms. This insight may be particularly meaningful to prospective marketing managers. Finally, my results on family firms' superior advertising intensities and their tendency to maintain their advertising intensities during recessions compared to pre-recession levels also make such firms exciting clients for advertising and media agencies to target. This is particularly true because most firms cut back on advertising during recessions (Deleersnyder et al. 2009) with the U.S. Ad spending falling by 6.5 percent in 2001, the biggest decline since 1938 (Johnson 2003).

CHAPTER FIVE: LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

Though my dissertation has important theoretical and managerial implications, it is not without its limitations. These limitations, in turn, necessitate future research.

First, with private firms' secondary data being unavailable, I limited the samples in my three essays to large publicly listed firms. I also focused either on short-term accounting-based measures of firm performance (such as ROA in essay one), or assumed (in essay two and three), that in line with efficient market hypothesis, the value of firms' strategic actions is captured in the firms' stock price (leading me to use such measures of firm performance as abnormal returns in essay 2 and Tobin's *q* in essay 3). Future research should confirm my results' generalizability to privately held and smaller publicly listed family firms and also use other long-term measures of firm performance such as buy-and-hold returns.

Second, I focused on firms in the U.S. alone. Family firms also play a significant role in Europe, Asia, and in emerging economies in general. Europe's family firms include such FN firms as Bouygues, J. Sainsbury and Otto and such NFN firms as Carrefour, Novartis and BMW. FN firms like Tata and Mahindra & Mahindra dominate the Indian business landscape. LG and Samsung are two well-known South Korean NFN firms. Further research is required to see if my results generalize to such firms outside the US.

Third, although my sample does not include such firms, some firms start off as family firms but, over time, do not remain so. For example, McDonald's, Procter & Gamble, Nestlé started as FN firms but their founding families no longer own or manage these firms. Further research can explore how the performance and strategic behavior of such firms evolves over time. Do firms which start off as family firms continue to perform better during recessions as compared to other

non-family firms even without the presence of the founding family? Do family firms named after their founding families continue to exhibit few product-related weaknesses and a high emphasis on advertising relative to R&D even when the founding family exits the firm? If so, what factors allow a founding family to influence the firm's strategic behavior, even when the family is no longer involved with the firm?

Fourth, it is possible some family firms are not named after their founding families, but are nevertheless readily recognized by customers as being family firms. Microsoft corp. which has a famous founder in Bill Gates may fall under this category of firms. Other family firms that are not named after their founding families may proactively advertise their family ownership. For example, Columbia Sportswear has frequently run advertisements featuring Gert and son Tim Boyle, members of the founding Boyle family. I expect the visibility of the family-firm link to be higher for such non-family-named firms as compared to other non-family-named firms whose founders are not famous and who do not proactively advertise their 'familiness'. This leads to the question: Do NFN firms with famous founders and those that proactively advertise their family ownership behave as FN firms in terms of their strong emphasis on protecting firm reputation?

Fifth, because of data limitations I was only able to provide indirect evidence of family firms' more long-term investment horizon. I provided this evidence by highlighting the unique strategic behavior of family firms (e.g., a lower decrease in their advertising intensity during recessions). Similarly, while I argued that FN firms place a higher emphasis on protecting firm reputation than NFN firms, I did not measure founding families' weaknesses for protecting firm reputation directly. On the contrary, I inferred FN firms' greater emphasis on protecting firm reputation from their unique strategic behavior (e.g., FN firms' fewer product-related weaknesses). I encourage future researchers to complement my findings by using direct

measures of long-term orientation, and emphasis on protecting firm reputation, e.g., via surveys of managers.

Finally, I limited my dissertation to studying only a few strategic factors such as degree of corporate citizenship, advertising intensity, leverage, and product-related strengths and weaknesses. This is not to suggest that the factors studied are the only factors by which family firms differ from non-family firms, or FN firms differ from NFN firms. On the contrary, the choice of variables was dictated by my overarching theoretical frame, focusing on emphasis on protecting firm reputation (in essay 1 and 2), and long-term orientation (in essay 3). I encourage researchers to explore other structural, managerial, strategic, cultural, and process-related factors that differentiate family firms from non-family firms, and those family firms that are also family-named from those family firms that are not.

TABLES

TABLE 2.1
Descriptive Statistics and Correlation Coefficients (Chapter 2)

		M	(SD)	Min	Max	1	2	3	4	5	6	7	8	9	10	11	12
1	**CMO Presence**	.46	.50	0	1												
2	**Strategic Emphasis**	-.02	.09	-.66	.27	-.01											
3	**Total Social Strengths**	2.02	2.27	0	14	.19**	-.051										
4	**Total Social Weaknesses**	1.69	1.57	0	12	.03	.02	.19**									
5	**Family Name**	.28	.70	0	1	.16**	.20**	.03	-.14**								
6	**Globalization**	.23	.23	0	.89	.03	-.30**	.20**	-.07	-.12**							
7	**Total Diversification**	.49	.52	0	2.03	-.12**	-.01	.07	.01	.03	.002						
8	**Size (ln of sales in $m)**	8.54	1.17	6.23	12.75	.12**	.16**	.44**	.30**	.01	-.008	.16**					
9	**Firm Age (ln of age)**	3.65	.69	.69	5.19	-.02	.21**	.08**	.07*	.03**	-.14**	.08**	.02				
10	**Leverage**	.28	.70	0	7.7	.07	.06	.17**	.04	.14**	-.02	.001	.15**	.10**			
11	**Prior Performance (ROA)**	.063	.079	-.58	.39	.055	-.01	.074	-.14*	.06	.11**	-.09*	.02	-.03	-.06		
12	**Family Ownership**	.17	.17	.01	.79	-.08*	.26**	-.13**	.11**	.05	.01	-.03	-.12**	.24**	.06	-.04	
13	**Value of Brands**	.10	.30	0	1	.16**	.11**	.07	.07*	.06	.22*	-.006	.33**	-.09**	.12**	.12**	.03

*p < .1, **p < .05, two-tailed significance levels
Note: Table shows correlation between measures pooled across 130 firms and 5 years, N = 650 firm years

TABLE 2.2

Result of Probit Regression with Family Name Presence as Dependent Variable (Chapter 2)

Independent Variables	Coefficient	S.E	Z
Co-owner	-.45**	.20	-2.25
Founder's age	.007	.012	.57
B2B	- .49*	.27	-1.80
Durables	.40	.30	1.33
Services	-.30	.27	-1.11
Control	-.52	.48	-1.07

* p <.10, ** p < .05, two-tailed significance levels
Result of Probit Regression for N= 130 firms
Wald $chi^2(5)=15.81$, Prob > $chi^2= .007$

TABLE 2.3

Results of Panel Logistic Regression with CMO Presence as Dependent Variable

Independent Variables	Coefficient	S.E	Z
Family Name	6.03**	1.74	3.47
Size	.27	.51	.53
Age	.74	.94	.79
Innovation	14.19**	5.55	2.56
Differentiation	8.69	11.21	.78
Diversification	-1.29	.92	-1.40
Prior Performance (ROA)	-1.45	3.13	-.46
Family ownership	.57	3.34	.17
Value of brand	5.16*	2.07	2.49
Mills lambda	6.49**	2.26	2.87
Constant	-17.65**	6.03	-2.93

* p <.05, **p < .01, two-tailed significance levels.
Random panel-effects logistic regression for N = 650 observations i.e., 130 firms over 5 years.
Wald $chi^2(11)=34.35$, Prob > $chi^2=.0003$

TABLE 2.4

Results of Random effects GLS regression with Strategic Emphasis as Dependent Variable

	Model A		Model B	
Independent Variables	**Coefficient**	**S.E**	**Coefficient**	**S.E**
Family name	.036*	.017	.045**	.017
Size	.013*	.006	.016**	.005
Age	.017	.011		
Leverage	4.4E-4	.006		
Prior performance	-.138**	.040	-.137**	.040
Family ownership	.127**	.040	.143**	.038
Value of brand	.014	.022		
Mills lambda	-.013	.026		
Constant	-.207**	.076	-.188**	.048

*p < .05, **p < .01, two-tailed significance levels

Model A, Random effects Negative Binomial regression for N = 650 observations (130 firms over 5 years)
Wald $chi^2(8) = 40.80$, Prob > $chi^2 = .000$

Model B, Random effects Negative Binomial regression for N=650 observations (130 firms over 5 years)
Wald $chi^2(4)=37.78$, Prob > $chi^2 = .000$

TABLE 2.5
Results of Random effects Negative Binomial Regression with total social strengths/total social weaknesses as Dependent Variable

Dependent Variable	**Total social strengths [a]**		**Total social weaknesses [b]**	
Independent Variables	**Coefficient**	**S.E**	**Coefficient**	**S.E**
Family name	-.15	.22	-.39*	.13
Size	.38**	.07	.23**	.046
Age	.21	.14	.12	.09
Leverage	.02	.06	-.010	.065
Prior performance	.66	.56	-.50	.41
Family ownership	-.66	.47	.42	.31
Mills lambda	.16	.35	-.10	.20
Constant	14.7	228.1	14.2	200.9

*p < .05, **p < .01, two-tailed significance levels.
a Random effects Negative Binomial regression for N=650 observations (130 firms over 5 years)
Wald $chi^2(7) = 41.80$, Prob > $chi^2 = .000$
b Random effects Negative Binomial regression for N=650 observations (130 firms over 5 years)
Wald $chi^2(7) = 41.28$, Prob > $chi^2 = .000$

TABLE 2.6

Results of Random effects GLS regression with ROA as Dependent Variable

Independent Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coeff (z-values)	Coeff (z-values)	Coeff (z-values)	Coeff (z-values)	Coeff (z-values)	Coeff (z-values)
Family name	.027 (2.06)**	.028(2.12)**	.028(2.11)**	.023(1.72)*	.015(1.11)	.010(.81)
Firm Size	.008 (1.80)*	.009(2.00)**	.008(1.76)*	.016(2.25)**	.005(1.17)	.007(1.49)
Firm Age	.004(.52)	.004(.51)	.004(.51)	.005(.67)	.001(.19)	.002(.25)
Leverage	-.009(-1.58)	-.009(-1.57)	-.009(-1.56)	-.009(-1.63)	-.009(-1.75)*	-.009(-1.74)*
Globalization	.050(2.22)**	.051(2.24)**	.051(2.19)**	.046(2.01)**	.083(3.65)***	.068(2.89)***
Diversification	-.010(-1.0)	-.011(-1.07)	-.011(-.1.06)	-.011(-1.13)	-.006(-.68)	-.008(-.84)
Family ownership	-.035(-1.15)	-.035(-1.17)	-.035(-1.16)	-.029(-.96)	-.074(-1.46)	-.055(-1.45)
Lees Lambda	-.017(-.88)	-.016(-.81)	-.016(-.81)	-.018(-.92)	-.016(-.84)	-.016(-.86)
CMO		-.005(-.61)	-.005(.007)	-.003(-.41)	.003(.42)	.003(.48)
Total strengths			1.0E-5(.01)	5.3E-4(.25)	1.0E-3(.53)	1.0E-3(.41)
Total weaknesses				-6.7E-3 (-2.77)***	-6.1E-3(-2.69)***	-6.4E-3(-2.83)***
Strategic emphasis					.344(10.14)***	.198(2.97)***
(Strategic emphasis)^2						-.116(-2.51)**
Constant	-.004(-.07)	-.006(-.11)	-.023(-.61)	-.031(-.83)	.038 (.64)	.031 (.52)
Sobel's Test statistic		-.72	-.01	-1.99**	2.13**	
Overall Wald-test	Wald Chi^2(8) =17.28**	Wald Chi^2(9) = 17.63**	Wald Chi^2(10) = 17.68**	Wald Chi^2(11) = 25.49***	Wald Chi^2(12) = 131.52***	Wald Chi^2(13)= 138.55***

*p < .10, **p < .05, ***p<.01, two-sided test of significance

Sobel's Test statistic is calculated assuming CMO, total strengths, total weaknesses and strategic emphasis to be the moderator in Model 2, Model 3, Model 4 and Model 5 respectively.

TABLE 3.1
Description of product-related strengths & weaknesses in KLD Database (as of 2007)

Strengths:	**Description:**
Benefits to Economically disadvantaged	The company has a part of its basic mission the provision of services for the economically disadvantaged.
Quality	The company has a long-term, well-developed, company-wide quality program, or it has a quality program widely recognized as exceptional.
R&D/Innovation	The company leads its industry in the research and development of innovative products.
Other Strengths	The company's products have social benefits that are highly unusual or unique for its industry and not covered by other KLD ratings.
Weaknesses:	**Description:**
Antitrust	The company has recently paid substantial fines or civil penalties for antitrust violations such as price fixing, collusion, or predatory pricing, or is involved in major controversies or regulatory actions related to antitrust allegations.
Marketing/Contracting Controversy	The company has either been involved in a major marketing or contracting controversy, or has paid a substantial fine or civil penalty relating to advertising practices, consumer fraud, or government contracting.
Safety	The company has either paid substantial fines or civil penalties, or is involved in a major recent controversy or regulatory action, relating to the safety of its products or services.
Other weakness	The company has major controversies with its franchises, is an electric utility with nuclear safety problems, defective product issues, or is involved in other product-related controversies not covered by other KLD ratings.

Source: KLD Research & Analytics Inc.

TABLE 3.2
Descriptive Statistics and Correlation Coefficients (Chapter 3)

		M	(SD)	1	2	3	4	5	6	7	8	9	10	11	12
1	**Family name**	.22	.42												
2	**Product strengths**	.96	1.94	-.03											
3	**Product weaknesses**	1.91	2.71	-.23**	.13**										
4	**Corporate branding**	.73	.44	.05	.02	-.12**									
5	**Family influence**	.41	.49	-.14**	.11**	-.02	-.01								
6	**Age (Ln age)**	3.56	.72	.19**	-.07*	.23**	-.18**	.24**							
7	**Size (Ln employees)**	2.94	1.32	.26**	.05	.23**	-.03	-.04	.46**						
8	**Diversification**	.54	.58	-.01	.03	.07*	-.23**	.01	.09**	.15**					
9	**Globalization**	.44	.28	.12**	.01	-.09**	.14**	.09**	-.09**	-.07**	.09**				
10	**R&D intensity**	.07	.06	- .28**	-.04	.02	.09**	-.03	-.24**	-.44**	.02	.39**			
11	**Advertising intensity**	.02	.04	.11**	-.08**	.06*	-.11**	.08**	.12**	.14**	-.003	.11**	-.15**		
12	**No. of new products/year**	8.65	4.98	.04	-.11**	-.11**	.34**	.16**	-.33**	-.02	-.07*	.16**	.39**	-.16**	
13	**Inverse Mills ratio**	1.31	.36	-.47**	-.24**	-.19**	.33**	.04	-.26**	-.22**	-.12**	-.15**	.13**	-.11**	.11**

*p < .05; **p < .01; two-sided significance levels. Table shows pooled correlation between 1294 firm year observations.

TABLE 3.3

Results of Probit Regression with Family-name presence as Dependent variable (Chapter 3)

	Coeff. (z-value)
Independent variable	
Co-owner	-.775(-2.60)***
Founders' age	-.001(-.08)
B2B	.153(.49)
Durables	-.234(-.65)
Services	-.527(-1.66)*
Constant	-.048(-.09)

Result of Probit regression for N = 107 firms. Wald $Chi^2(5) = 11.25$, Prob > $Chi^2 = .04$
The symbols *,**, and *** denote statistical significance at the .10, .05, and .01 levels, respectively, using a 2-tail test.

TABLE 3.4

Results of negative binomial regression with history of product related strengths/product related weaknesses as the dependent variable

Dependent variable	**Product related strengths**		**Product related weaknesses**	
	Model 1	**Model 2**	**Model 3**	**Model 4**
	Coeff. (z-value)	**Coeff. (z-value)**	**Coeff. (z-value)**	**Coeff. (z-value)**
Independent variable				
Family named (dummy = 1)	-.194(-1.08)	-.296(-.13)	-2.26(-5.03)***	-.98(-1.67)*
Controls				
Corporate branding (dummy = 1)	.121(1.68)*	2.36(2.44)**	-.07(-.21)	.093(.26)
Family named * corporate branding		-3.84(-1.55)		-1.40(-2.08)**
Family influence (dummy = 1)	1.20(1.80)*	.811(1.06)	-.194(.62)	-.174(-.55)
Family named * family involved		.200(.10)		-1.31(-1.79)*
Diversification	.486(.78)	.347(.58)	-.469(-1.73)*	-.326(-1.13)
Globalization	1.53(.97)	1.85(1.36)	-.456(-1.85)*	-.623(-1.05)
Firm age	-.204(-.53)	-.478(-1.23)	.336(1.42)	.172(2.38)**
Firm size	.427(1.72)*	.578(1.77)*	.429(2.65)**	.432(2.78)***
Inverse mills ratio	-2.69(-3.06)***	-.87(-.69)	-1.06(-2.29)**	-1.16(-2.37)***
Intercept	2.18(.86)	4.89(1.73)*	.44(.22)	1.23(.52)

N = 1294 observations. The symbols *,**, and *** denote statistical significance at the .10, .05, and .01 levels, respectively, using a 2-tail test.
All four models also include 7 dummy variables for 7 different 1-digit SIC codes and clustered (by firm) standard errors.

TABLE 3.5

Results of OLS Regression with Abnormal Return on day 0 as the Dependent Variable

	Carhart 4-factor model		**Market Model**	
	Model 1	**Model 2**	**Model 3**	**Model 4**
	Coeff. (t-value)	**Coeff. (t-value)**	**Coeff. (t-value)**	**Coeff. (t-value)**
Independent variable				
Family named (dummy = 1)	.436(3.45)***	-.398(-1.51)	.532(4.29)***	-.389(-1.50)
Controls				
Corporate branding (dummy = 1)	.153(1.40)	-.021(-.17)	.123(1.14)	-.061(-.52)
Family named * corporate branding		.968(3.53)***		1.04(3.86)***
Family influence (dummy = 1)	-.095(-1.09)	-.088(-.93)	-.099(-1.15)	-.103(-1.11)
Family named * family involved		.485(1.93)*		.590(2.39)**
Diversification	.071(.92)	-.049(-.56)	.071(.93)	-.066(-.77)
Globalization	-.087(-.47)	-.069(-.37)	-.138(-.75)	-.111(-.60)
Firm age	.022(.077)	.133(1.61)*	.046(.61)	.168(2.08)**
Firm size	.066(1.71)*	.072(1.63)*	.052(1.70)*	.057(1.33)
R&D intensity	1.67(1.74)*	3.20(2.90)***	1.72(1.71)*	3.36(3.11)***
Advertising intensity	4.29(3.97)***	4.08(3.67)***	4.36(4.09)***	4.06(3.71)***
Number of new products per year	.01(.48)	-1E-4(-.01)	.011(.91)	.004(.37)
Inverse mills ratio	-.18(-1.22)	-.083(-.54)	-.168(-1.13)	-.066(-.44)
Intercept	2.01(2.54)**	1.42(1.75)*	2.51(3.20)***	1.87(2.35)**
N	1294	1294	1294	1294
Adjusted R^2	4.30%	5.25%	5.43%	6.48%
Overall F-test	F(18,1275) = 4.24***	F(20, 1273)=4.75***	F(18,1275)=5.13***	F(20,1273) = 5.48***
Root MSE	1.40	1.40	1.39	1.38

The symbols *,**, and *** denote statistical significance at the .10, .05, and .01 levels, respectively, using a 2-tail test.

TABLE 3.6

Results of OLS Regression with Abnormal return on day 0 (Carhart 4-factor model) as the Dependent Variable

	Model 1	Model 2	Model 3	Model 4	Model 5
	Coeff. (t-value)	**Coeff. (t-value)**	**Coeff. (t-value)**	**Coeff. (t-value)**	**Coeff. (t-value)**
Independent variable					
Family named (dummy = 1)	.436(3.45)***	.455(3.53)***	.140(1.04)	.163(1.19)	.120(.87)
Proposed mediators					
Product-related strengths		.017(.75)		.022(.98)	.102(2.97)***
Product-related weaknesses			-.108(-5.83)***	-.109(-5.86)***	-.111(-4.31)***
Strengths * diversification					-.129(-2.94)***
Weaknesses * diversification					-.003(-.09)
Controls					
Corporate branding (dummy = 1)	.153(1.40)	.137(1.23)	.186(1.72)*	.165(1.49)	.143(1.29)
Family influence (dummy = 1)	-.095(-1.09)	-.102(-1.16)	-.140(-1.04)	-.126(-1.46)	-.084(-.95)
Diversification	.071(.92)	.072(.93)	.010(.13)	.011(.14)	.098(1.10)
Globalization	-.087(-.47)	-.083(-.44)	-.344(-1.82)*	-.340(-1.80)*	-.360(-1.88)*
Firm age	.022(.077)	.033(.42)	.016(.21)	.030(.39)	.083(1.06)
Firm size	.066(1.71)*	.062(1.67)*	.168(3.58)***	.162(3.42)***	.175(3.69)
R&D intensity	1.67(1.74)*	1.66(1.72)*	3.19(3.05)***	3.17(3.04)***	3.54(3.37)***
Advertising intensity	4.29(3.97)***	4.40(4.03)***	4.92(4.58)***	5.06(4.68)***	5.34(4.94)***
Number of new products per year	.01(.48)	.008(.62)	-.006(-.47)	-.003(-.27)	-.005(-.42)
Inverse mills ratio	-.18(-1.22)	-.145(-.91)	-.570(-3.51)***	-.522(-3.07)***	-.565(-3.3)***
Intercept	2.01(2.54)**	1.93(2.40)**	2.37(3.02)***	2.26(2.85)***	2.00(2.51)***
N	1294	1294	1294	1294	1294
Adjusted R^2	4.30%	4.31%	6.77%	6.77%	7.38%
Overall F-test	F(18,1275) =	F(19, 1274)=4.04***	F(19,1274)=5.91***	F(20,1273) = 5.66***	F(22,1271) = 5.65***
Root MSE	1.40	1.41	1.39	1.39	1.38

Note: Abnormal return on day 0 are calculated using the Carhart 4-factor model
The symbols *,**, and *** denote statistical significance at the .10, .05, and .01 levels, respectively, using a 2-tail test.
All four models also include 7 dummy variables for 7 different 1-digit SIC codes.

TABLE 4.1
Difference of means test between family and non-family firms

Full sample (7 recessions)										
	Pre-recession years			During recession years			Change during recession relative to pre-recession			
	Family	Non-Family	t-stat	Family	Non-Family	t-stat	Family	Non-Family	t-stat	
1. Number of firms	193	235		193	235		193	235		
2. Tobin's *q*	1.56	1.30	2.98***	1.45	.99	5.71***	-.11	-.32	5.49***	
3. Ad intensity	.034	.018	3.94***	.035	.015	4.95***	+.001	-.003	4.53***	
4. Debt to equity	1.47	2.03	-2.14**	1.50	2.05	- 3.21***	+.03	+.02	.44	
Sub sample (2001 and 2008 recession)										
	Pre-recession years			During recession years			Change during recession relative to pre-recession			
	Family	Non-Family	t-stat	Family	Non-Family	t-stat	Family	Non-Family	t-stat	
1. Number of firms	180	165		180	165		180	165		
2. Tobin's *q*	1.87	1.55	2.05**	1.61	1.09	4.64***	-.27	-.47	2.27**	
3. Ad intensity	.028	.018	2.59**	.030	.013	4.13***	+.002	-.004	3.77***	
4. Debt to equity	1.70	3.05	-2.11**	1.81	3.09	- 4.69**	+.11	+.05	.12	
5.Employee strengths	1.85	2.17	-1.75*	1.62	1.94	-1.81*	-.22	-.27	.41	
6. Employee weaknesses	.89	1.09	-1.89*	.83	1.23	- 3.37***	-.05	+.14	-2.05**	
7. Social strengths	.98	1.38	-2.51**	.97	1.36	- 2.53**	-.01	-.02	.10	
8. Social weaknesses	1.58	2.87	-5.83**	1.69	3.18	-6.50***	+.11	+.31	-2.28**	

The means tests are based on time-series averages of each firm in the sample. *t*-statistics are based on clustered (by firm) standard errors
*p < 0.10, **p < 0.05, ***p < 0.01, two-tailed significance levels.

TABLE 4.2
Descriptive Statistics and Correlation Coefficients (Chapter 4)

		M	(SD)	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	**Family Firm**	.52	.50														
2	**Tobin's *q***	1.37	1.34	.18**													
3	**Prior Tobin's *q***	1.75	1.89	.07**	.81**												
4	**Advertising intensity**	.022	.043	.19**	.22**	.12**											
5	**Debt to equity**	2.34	2.74	-.20*	-.27*	-.23	-.13										
6	**Employee strengths**	1.81	1.83	-.10*	.02	.08*	.05	.08									
7	**Employee weaknesses**	.95	1.20	-.10**	- .18**	- .11**	-.12**	.11	.12**								
8	**Social strengths**	1.16	1.72	-.12*	-.03	.02	.02	.04	.52**	.11**							
9	**Social weaknesses**	2.44	2.44	-.31**	-.17**	-.06	-.15**	.16	.39**	.24**	.44**						
10	**Diversification**	.61	.57	- .13**	.03	.03	-.02	-.01	.10*	-.04	.14**	.20**					
11	**Globalization**	.28	.26	- .13**	.05	.11*	.01	-.01	.14**	.03	.30**	.25**	.15**				
12	**R&D intensity**	.023	.041	.04	.27**	.37**	-.06	-.16	.21**	-.12**	.21**	.07*	.09*	.37**			
13	**Firm size (Ln total assets)**	8.90	1.40	-.25**	-.17**	- .07	- .20**	.30	.42**	.22**	.40**	.57**	.19**	.20**	.01		
14	**Firm age (Ln Age)**	4.12	.68	-.35**	- .26**	-.23**	.006*	.23	.13**	.07	.18**	.23**	.19**	.13**	-.17**	.16**	

*p < .10, **p < .05, ***p < .01, two-tailed significance levels. Table shows pooled correlation between 685 firm year observations (338 firms present during 2 recession periods, 2001 and 2008, and 9 firms present during the 2001 recession)

TABLE 4.3
Results of Random effects GLS regression with Advertising Intensity as Dependent Variable

	Recession years observations only	*Recession and pre-recession year observations*	
	Model 1	**Model 2a**	**Model 2b**
Independent Variable	***Coefficient(z-value)***	***Coefficient (z-value)***	***Coefficient (z-value)***
Family firm	.015(3.79)***	.013(3.14)***	.012(2.86)***
Recession (dummy = 1)		*-2.2E-3(-2.13)***	*-3.0E-3(-3.05)****
*Family firm * Recession*		*2.7E-3(1.71)**	*3.7E-3(2.38)***
Size	*-3.0E-3(-5.70)****	*-2.6E-3(-6.84)****	*-2.8E-3(-7.32)****
Age	*3.0E-3(1.86)**	*2.6E-3(1.99)***	*2.6E-3(2.05)***
Prior Performance	*-3.8E-4(-.74)*	*1.6E-4(.44)*	
Debt Ratio	*-3.4E-4(-1.04)*	*3.2E-5(.29)*	
Diversification	*1.2E-3(.83)*	*1.3E-3(1.17)*	
Globalization	*5.2E-3(1.74)**	*6.7E-4(.26)*	
Constant	*7.1E-3(.38)*	*7.9E-3(.43)*	*9.8E-3(.52)*

*p < .10, **p < .05, ***p < .01, two-tailed significance levels
For All Models, independent variables also include 55 SIC-2-digit dummies not presented in the table.
For Model 1, N = 2316 observations (428 firms over a maximum of 7 recession years)
Wald $Chi^2(62) = 244.71$, Prob > $Chi^2 = .0001$
Hausman test of Model 1 using fixed effects rather than random effects: $Chi^2(6) = 2.89$, Prob > $Chi^2 = .83$
For Model 2a, N = 4632 observations (428 firms over a maximum of 7 recession periods and 7 pre-recession years)
Wald $Chi^2 64) = 265.69$, Prob > $Chi^2 = .0001$
For Model 2b, N = 4632 observations (428 firms over a maximum of 7 recession periods and 7 pre-recession years)
Wald $Chi^2(60) = 262.46$, Prob > $Chi^2 = .0001$
Difference in Chi^2 between Model 2b and Model 2a (nested models) = 3.23, Difference in degrees of freedom = 4, p = .52 > .01

TABLE 4.4
Results of Random effects GLS regression with Debt Ratio as Dependent Variable

	Recession years observations only	*Recession and pre-recession years observations*
	Model 1	**Model 2**
Independent Variable	***Coefficient(z-value)***	***Coefficient (z-value)***
Family firm	- .45(-3.19)***	-.41(-2.06)**
Recession (dummy = 1)		*0 .014(.10)*
*Family firm * Recession*		*-.015(-.07)*
Size	*.28(9.40)****	*.30(7.64)****
Age	*-.046(-.58)*	*-.11(-1.15)*
R&D intensity	*-2.89(-1.81)**	*.61(.29)*
Prior Performance	*-.16(-4.89)****	*-.13(-2.92)****
Diversification	*-.18(-1.99)***	*-.17(-1.37)*
Globalization	*.33(1.52)*	*-.20(-.65)*
Constant	*-.42(-.63)*	*-.62(-.77)*

*p < .10, **p < .05, ***p < .01, two-tailed significance levels
For All Models, independent variables also include 55 SIC-2-digit dummies not presented in the table.
For Model 1, N = 2316 observations (428 firms over a maximum of 7 recession years)
Wald $Chi^2(62) = 584.30$, Prob > $Chi^2 = .0001$
For Model 2, N = 4632 observations (428 firms over a maximum of 7 recession periods and 7 pre-recession years)
Wald $Chi^2(64) = 471.52$, Prob > $Chi^2 = .0001$

TABLE 4.5

Results of Negative Binomial Regression with Social strengths, Social weaknesses, Employee strengths and Employee weaknesses, as Dependent Variables

	Recession years observations only				Recession and pre-recession years observations			
	Model 1	**Model 2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**	**Model 7**	**Model 8**
Dependent Variable	**Social strengths [a]**	**Social weaknesses [b]**	**Employee strengths [c]**	**Employee weaknesses [d]**	**Social strengths [e]**	**Social weaknesses [f]**	**Employee strengths [g]**	**Employee weaknesses [h]**
Independent Variables	**Coefficient (z-value)**	**Coefficient (z-value)**	**Coefficient (z-value)**	**Coefficient (z-value)**	**Coefficient (z-value)**	**Coefficient (z-value)**	**Coefficient (z-value)**	**Coefficient (z-value)**
Family Firm	.15 (1.20)	-.31(-4.51)***	.03(.32)	-.23(-2.08)**	.19(1.32)	-.28(-3.7)***	.020 (.19)	-.01(-.05)
Recession (dummy = 1)					-.05(-.74)	*.09(1.86)**	*-.15(-2.68)****	*.15(2.06)***
*Family firm * Recession*					*.04(.35)*	*-.04(-2.51)***	*.012(.15)*	*-.23(-2.04)***
Prior Tobin's q	*- .03(-.94)*	*-.062(-3.12)****	*.02(.82)*	*-.12(-3.28)****	*-.04(-1.87)**	*-.055(-3.49)****	*2.1E-3(.14)*	*-.13(-4.55)****
Firm Size	*.47(9.97)****	*.40(15.1)****	*.32(8.57)****	*.16(4.03)****	*.42(9.60)****	*.40(16.57)****	*.30(9.38)****	*.15(4.51)****
Firm Age	*.13(1.35)*	*.02(.35)*	*.06(.85)*	*.06(.67)*	*.16(1.68)**	*.028(.59)*	*.017(.26)*	*.03(.43)*
Globalization	*.74(3.24)****	*.28(2.14)***	*.21(1.14)*	*.17(.84)*	*0 .89(4.80)****	*.30(2.65)****	*.29(1.97)***	*.15(.88)*
Diversification	*-.15(-1.59)*	*.025(.44)*	*-.09(-1.09)*	*-.10(-1.07)*	*-.11(-1.25)*	*.03(.66)*	*-.07(-1.08)*	*-.10(-1.30)*
Constant	*-2.74(-2.5)***	*14.3(34.4)****	*11.9(.04)*	*16.4(29.5)****	*13.9(22.4)****	*15.1(45.8)****	*13.5(30.4)****	*15.9(33.9)****

*p < .10, **p < .05, ***p < .01, two-tailed significance levels.

All regressions include 7, SIC-1-digit industry variables

a Random effects Negative Binomial regression for N=685 observations (observations for 2001, and 2008 years)
Wald $chi^2(13)=192.71$, Prob > chi^2 = .0001

b Random effects Negative Binomial regression for N=685 observations (observations for 2001 and 2008 years)
Wald $chi^2(13)$ = 427.5, Prob > chi^2 = .0001

c Random effects Negative Binomial regression for N=685 observations (observations for 2001 and 2008 years)
Wald $chi^2(13)=116.07$, Prob > chi^2 = .0001

d Random effects Negative Binomial regression for N=685 observations (observations for 2001 and 2008 years)
Wald $chi^2(13)$ = 65.75, Prob > chi^2 = .0001

e Random effects Negative Binomial regression for N=1370 observations (observations for 2000, 2001, 2007 and 2008 years)
Wald $chi^2(15)=220.41$, Prob > chi^2 = .0001

f Random effects Negative Binomial regression for N=1370 observations (observations for 2000, 2001, 2007 and 2008 years)
Wald $chi^2(15)$ = 487.6, Prob > chi^2 = .0001

g Random effects Negative Binomial regression for N=1370 observations (observations for 2000, 2001, 2007 and 2008 years
Wald $chi^2(15)=152.39$, Prob > chi^2 = .0001

h Random effects Negative Binomial regression for N=1370 observations (observations for 2000, 2001, 2007 and 2008 years)
Wald $chi^2(15)$ = 85.86, Prob > chi^2 = .0001

TABLE 4.6

Results of OLS Regression of Tobin's q during recession years on Family firms using industry dummies and clustered standard errors

	Full sample (7 recessions)				Sub-sample (2001 and 2008 recessions)			
	Model 1	**Model 2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**	**Model 7**	**Model 8**
	Coeff (t-value)	**Coeff(t-value)**	**Coeff (t-value)**	**Coeff (t-**	**Coeff (t-value)**	**Coeff (t-value)**	**Coeff (t-value)**	**Coeff (t-value)**
Family Firm (dummy =1)	.28(4.85)***	.22 (3.88)***	.23 (5.05)**	.20 (4.59)**	.26(2.45)**	.01(.01)	.22(4.07)***	.12 (2.01)**
Prior Tobin's *q*			.62 (14.75)***	.61(14.51)***			.56(9.06)***	.54(8.68)***
Firm Size	-.028(-1.70)*	.002(.11)	-.039(-2.87)***	-.028(-2.02)**	-.093(-1.77)*	.018(.26)	-.087(-3.03)***	-.032(-.84)
Firm Age	-.145(-4.00)***	-.150(-4.17)***	-.038(-1.31)	-.040(-1.41)	-.036(-3.38)***	-.36(-3.30)***	-.092(-1.90)*	-.101(-1.54)
Diversification	.02(.44)	.01(.14)	.02(.46)	.015(.35)	.12(1.04)	.11(.87)	.075(1.00)	.076(1.00)
Globalization	.32(2.63)***	.32(2.65)***		.16(1.47)	.050(.18)	.084(.33)	.063(.41)	.046(.29)
R&D intensity	5.39(6.96)***	5.10(6.63)***	.80(.69)	.77(.64)	7.2(3.54)***	7.45(3.36)***	-.79(-.75)	-.75(-.62)
Advertising intensity		1.22(2.05)**		.76(1.99)**		5.02(2.20)**		2.69(2.21)**
Debt Ratio		-.083(-6.78)***		-.026(-4.10)***		-.073(-4.19)***		-.019(-1.82)*
55 SIC 2-digit dummies	Present	Present	Present	Present				
7 SIC 1-digit dummies					Present	Present	Present	Present
Social strengths						-.016(-.53)		.008(.43)
Social weaknesses						-.064(-2.40)**		-.027(-1.68)*
Employee strengths						.030(.98)		-.004(-.23)
Employee weaknesses						-.088(-2.76)***		-.066(-2.88)**
Constant	1.97(6.86)***	1.88(6.62)***	.71(3.69)***	.69(3.58)***	3.10(4.77)	2.83(3.78)***	1.28(3.56)***	1.07(2.42)**
R squared	.170	.189	.673	.676	.181	.257	.690	.706

*p < .10, **p < .05, ***p < .01, two-sided test of significance
Full sample regression has N = 2317 observations (428 firms over a maximum of 7 recession periods)
Sub sample regression has N = 685 observations (345 firms over a maximum of 2 recession periods, 2001 and 2008)

TABLE 4.7

Results of OLS Regression of Tobin's q in pre-recession years on Family firms using industry dummies and clustered standard errors

	Full sample (7 recessions)		Sub-sample (2001 and 2008 recessions)	
	Model 1	**Model 2**	**Model 3**	**Model 4**
	(Coeff t-value)	**(Coeff t-value)**	**(Coeff t-value)**	**(Coeff t-value)**
Family Firm (dummy =1)	.13 (1.95)*	.022 (.34)	.06 (1.68)*	-.12(-.83)
Firm Size	-.029(-1.47)	-.020(-.94)	-.089(-1.79)*	.055(.70)
Firm Age	-.069(-1.77)*	-.11(-2.61)***	-.35(-3.41)***	-.43(-3.12)***
Diversification	-.15(-3.04)***	.16(-3.02)***	-.13(1.03)	-.17(-1.27)
Globalization	.67(3.81)***	.74(3.75)***	.15(.51)	.021(.05)
R&D intensity	8.7(6.00)***	9.6(6.39)***	13.7(8.06)***	20.1(5.04)***
Advertising intensity		2.34(3.03)***		6.09(2.41)**
Debt Ratio		-.010(-1.55)		-.0067(-1.05)
55 SIC 2-digit dummies (55)	Present	Present		
7 SIC 1-digit dummies			Present	Present
Social strengths				-.0086(-.21)
Social weaknesses				-.064(-1.98)*
Employee strengths				.011(.30)
Employee weaknesses				-.103(-2.97)***
Constant	1.56(9.22)***	1.68(9.45)***	3.6(5.93)***	3.14(3.68)***
R squared	.179	.198	.184	.263

*p < .10, **p < .05, ***p < .01, two-sided test of significance
Full sample regression has N = 2317 observations (428 firms over a maximum of 7 recession periods)
Sub sample regression has N = 685 observations (345 firms over a maximum of 2 recession periods, 2001 and 2008)

TABLE 4.8

Result of OLS and Instrumental Variable (IV) regressions of Tobin's *q* on family ownership

	OLS regression		IV two-stage regression	
	Model 1	Model 2	Model 3	Model 4
Independent Variable	**Coeff (t-values)**	**Coeff (t-values)**	**Coeff (t-values)**	**Coeff (t-values)**
Family ownership	1.39 (3.33)***	4.77 (3.74)***		
(Family ownership)^2		-7.94(-2.85)***		
Predicted ownership			9.44(3.73)***	6.17 (2.24)**
Prior Tobin's q	.56(9.17)***	.55(9.09)***	.56(9.05)***	.54(8.76)***
Firm Size	-.073(-2.99)***	-.070(-2.84)		
Firm Age	-.12(-2.08)**	- .10(-1.88)*	-.16(-2.67)***	-.13(-1.98)**
Diversification	.061(.85)	.067(.94)	.061(.84)	.082(1.12)
Globalization	.027(.17)	.058(.37)	.042(.27)	.079(.50)
R&D intensity	-.39(-.36)	-.28(-.26)	-.65(-.60)	-.55(-.49)
Advertising intensity				2.64(2.23)**
Debt ratio				-.020(-2.14)**
Social strengths				.010(.58)
Social weaknesses				-.031(-2.18)**
Employee strengths				-.0003(-.02)
Employee weaknesses				-.069(-3.01)***
Constant	1.27(4.28)***	1.12(4.02)***	-.32(-.80)	.21(.48)
R squared	.692	.700	.688	.739

*p < .10, **p < .05, ***p< .01, two-sided test of significance.
Results are based on 2001 and 2008 recession periods. N = 685 firm observations (345 firms over a maximum of 2 recession periods each)
Predicted ownership is calculated after regressing ownership on natural log of total assets, the square of natural log of total assets & return volatility.
All regressions include 7 SIC1-digit dummy variables and use Huber-White robust (clustered) standard errors.

TABLE 4.9
Results of OLS Regression of Tobin's *q* on founding family's management involvement

Independent Variable	Model 1 Coeff (t-values)	Model 2 Coeff (t-values)	Model 3 Coeff (t-values)
CEO founder	.39 (2.34)**		
CEO descendant	.20(2.27)**		
CEO outsider	.19 (3.09)***		
Chairman founder		.52(3.74)***	
Chairman descendant		.21(2.93)***	
Chairman outsider		.10(1.33)	
Chairman and CEO family			.27(2.53)**
Chairman or CEO family			.49(4.22)***
Chairman and CEO outsider			.08(.96)
Prior Tobin's *q*	.55(8.89)***	.55(8.99)***	.55(8.99)***
Firm Size	-.085(-2.96)**	-.087(-3.12)**	-.095(-3.31)***
Firm Age	-.095(-1.47)	-.062(-.97)	-.091(-1.46)
Diversification	.087(1.12)	.085(1.10)	.092(1.16)
Globalization	.064(.42)	.096(.62)	.048(.31)
R&D intensity	-.69(-.61)	-.53(-.48)	-.54(-.46)
Constant	1.19(3.21)***	1.04(2.83)***	1.26(3.36)***
R squared	.689	.695	.697

*p < .10, **p < .05, ***p< .01, two-sided test of significance
Results are based on 2001 and 2008 recession periods (N = 685 observations i.e. 345 firms over a maximum of 2 recession periods each)
All regressions include 7 SIC1-digit dummy variables and use Huber-White robust (clustered) standard errors.

TABLE 4.10

Results of Preacher and Hayes' (2008) SEM method of analyzing multiple mediation effects

The Preacher and Hayes approach uses bootstrapping to construct confidence intervals of the specific indirect effects of the independent variable (family firm in this case) on the dependent variable (Tobin's *q* in this case) via the proposed mediators (Ad intensity, Debt ratio, social strengths, social weaknesses, employee strengths and employee weaknesses in this case), after including covariates (prior Tobin's *q*, firm size, firm age, diversification, globalization, R&D intensity, and 7 1-digit industry dummy variables in this case). Note that SEM software such as AMOS only provides estimates of *total* indirect effects, not the *specific* indirect effects via the various proposed mediators. However, using the macros provided by Preacher and Hayes (2008), which can be found at www.quantpsy.org, these specific indirect effects can be found. Results of this approach are shown in the Table below. As the Table below reveals, in the full sample, family firm had a positive and significant effect on Tobin's *q* (.23, p < .01) of which 9.1% (i.e., .021) come indirectly from the two proposed mediators: advertising intensity and debt ratio. Furthermore, the specific indirect effects of family firm on Tobin's *q*, via both advertising intensity and debt ratio are significant (p < .05). Thus, in the full sample, family firms' higher advertising intensity and lower debt ratio during recessions at least partially mediate family firms' superior performance. With regards the sub-sample, family firm was again found to have a positive (.22) and significant (p < .01) total effect on Tobin's q. Out of this total effect, 34.5% (i.e., .076) came from the 6 proposed mediators. Furthermore, the specific indirect effects via both social weaknesses and employee weaknesses were significant, providing support for **Hypothesis 6d** and **Hypothesis 6f**. Thus, both the Baron and Kenny (1986) approach shown in Table 6, and the SEM approach demonstrated here, help us reach the following conclusion: family firms perform better than non-family firms during recessions, this superior performance mediated by their higher advertising intensity, lower debt ratio, fewer social weaknesses and fewer employee-related weaknesses.

a. Full sample results (all 7 recessions)

Effect of IV (family firm) on mediators			
Mediator	**Coeff**	**S.E**	**t-value**
Adv. intensity	.016***	.0021	7.42
Debt ratio	-.288***	.093	-3.10

Direct effects of Mediators on DV (Tobin's q)			
Mediator	**Coeff.**	**S.E.**	**t-value**
Adv intensity	.841***	.317	2.65
Debt ratio	-.025***	7.2E-3	-3.44

Total effects of IV on DV (Tobin's q)			
IV	**Coeff.**	**S.E**	**t-value**
Family firm	.23***	.031	7.10
Direct effect of IV on DV (Tobin's q)			
IV	**Coeff.**	**S.E.**	**t-value**
Family firm	.20***	.031	6.39

Bootstrap: Indirect effects of IV on DV through proposed mediators				
Mediator	**Coeff.**	**S.E**	**95% CI lower †**	**95% CI upper†**
Total	.021***	.006	.010	.034
Ad. Intensity	.013**	.005	.004	.025
Debt ratio	.007**	.003	.003	.014

b. Sub-sample results (2001 & 2008 recessions)

Effect of IV (family firm) on mediators			
Mediator	**Coeff.**	**S.E**	**t-value**
Adv. intensity	.012***	.0037	3.27
Debt ratio	-.58***	.22	-2.70
Social strengths	.19	.13	1.41
Social weaknesses	-.76***	.17	-4.55
Employee strengths	.034	.14	.24
Employee weaknesses	-.26**	.11	-2.43
Direct effects of Mediators on DV (Tobin's q)			
Mediator	**Coeff.**	**S.E**	**t-value**
Adv. intensity	2.77***	.77	3.59
Debt ratio	-.015*	.009	-1.74
Social strengths	.0026	.023	.11
Social weaknesses	-.02*	.0118	-1.69
Employee strengths	-.0006	.021	-.03
Employee weaknesses	-.068**	.027	-2.49
Total effects of IV (family firm) on DV (Tobin's q)			
IV	**Coeff.**	**S.E.**	**t-value**
Family firm	.222***	.069	3.21
Direct effect of IV on DV (Tobin's q)			
IV	**Coeff.**	**S.E.**	**t-value**
Family firm	.146**	.070	2.08

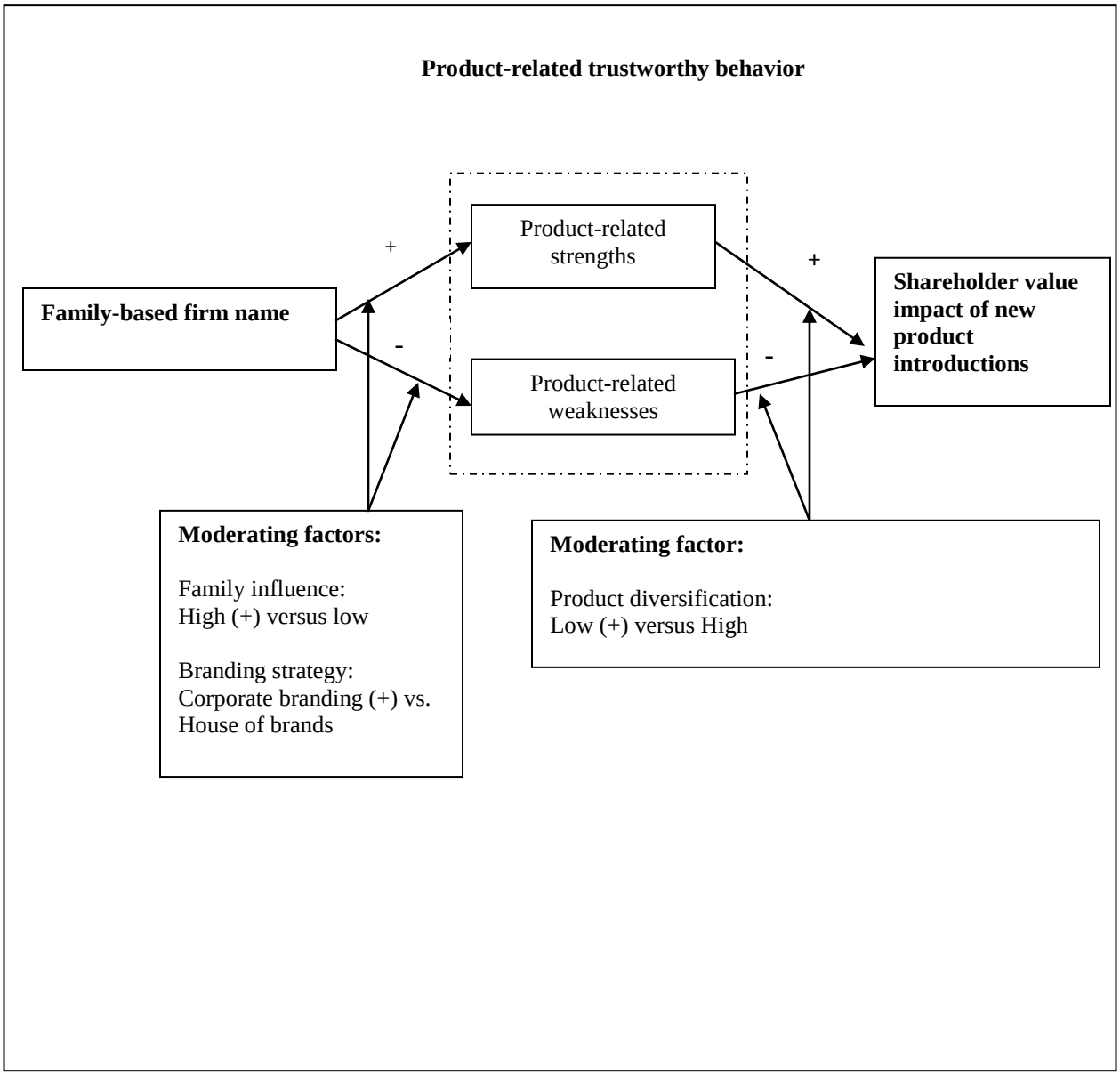
Bootstrap: Indirect effects of IV on DV through proposed mediators				
Mediator	**Coeff.**	**S.E.**	**95% CI lower†**	**95% CI upper†**
Total	.076***	.023	.042	.143
Ad. intensity	.034**	.014	.014	.075
Debt ratio	.009**	.005	.0003	.031
Social strengths	.0005	.005	-.009	.014
Social weaknesses	.016**	.008	.006	.045
Employee strengths	.0001	.003	-.006	.007
Employee	.0047**	.002	.006	.042

Both models include prior Tobin's *q*, firm size, firm age, globalization, diversification, R&D intensity, and SIC- industry dummies as covariates.
The full sample model includes 55 SIC-2-digit dummies as covariates while the sub-sample includes 7 SIC-1-digit dummies as covariates.N = 2317 observations in the full sample model and N = 685 observations in the sub-sample † The 95% confidence interval is bias corrected and accelerated. *p < .10; **p < .05; ***p < .01; two-sided test of significance.

FIGURES

FIGURE 3.1

Framework on the link between family-based firm name and value of new product introductions



REFERENCES

Aaker, D. A. (1991), "Justifying brand building," *Advertising Age*, 62(39): 22.

Aaker, D. A., and Jacobson, R. (2001), "The value relevance of brand attitude in high-technology markets," *Journal of Marketing Research*, 38(4): 485–493.

Agarwal, J., and Kamakura, W. A. (1995), "The Economic Worth of Celebrity Endorsers: An Event Study Analysis," *Journal of Marketing*, 59 (July), 56–62.

Ahmed, P., Gardella, J., and Nanda, S. (2002), "Wealth effect of drug withdrawals on firms and their competitors," *Financial Management*, 31 (Autumn), 21–41.

Ailawadi, K. L., Lehmann, D. R., and Neslin, S. A. (2003), "Revenue premium as an outcome measure of brand equity," *Journal of Marketing*, 67(October), 1–17.

Aldrich, H. E., and Cliff, J. E. (2003), "The pervasive effects of family on entrepreneurship: Toward a family embeddedness perspective," *Journal of Business Venturing*, 18, 573–596.

Ali, A., Chen, T-Y., and Radhakrishnan, S. (2007), "Corporate disclosures by family firms," *Journal of Accounting and Economics*, 44(1), 238–286.

Anderson, R. C., and Reeb, D. M. (2003), "Founding-family ownership and firm performance: Evidence from the S&P 500," *Journal of Finance,* 58(3), 1301–1328.

Anderson, R. C., Mansi, S. A., and Reeb, D. M. (2003), "Founding-family ownership and the agency cost of debt," *Journal of Financial Economics,* 68(2), 263–285.

Arregle, J-L., Hitt, M. A., Sirmon, D. G., and Very, P. (2007), "The development of organizational social capital: Attributes of family firms," *Journal of Management Studies*, 44(1): 73–95.

Astrachan, J. H., and Shanker, M. C. (2003), "Family businesses' contribution to the U.S. economy: A closer Look," *Family Business Review*, 16(3), 211–219.

Bahadir, S. C., Bharadwaj, S., and Parzen, M. (2009), "A meta-analysis of the determinants of organic sales growth," *International Journal of Research in Marketing,* 26(4), 263–275.

Bain Consulting Report (2002), "How to Bounce Higher Out of Recession?" *European Business Journal*, Dec 01. 2002.

Baron, R. M., and Kenny, D. A. (1986), "The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations," *Journal of Personality and Social Psychology*, 51(6), 1173–1182.

Barth, Mary E., Clement, M., Foster, G. and Kasznik, R. (1998), "Brand Values and Capital Market Valuation," *Review of Accounting Studies*, 3(1-2), 41–68.

Barney, J. B. (1991), "Firm Resources and Sustained Competitive Advantage," *Journal of Management,* 17(1), 99–120.

Bauer, R., Derwall, J., and Hann, D. (2009), "Employee Relations and Credit Risk," Working paper, (accessed May 01, 2011), [Available at SSRN: http://ssrn.com/abstract=1483112]

Baumeister, R. F. (1998), "The self," in *The handbook of social psychology*, D.T. Gilbert, S.T. Fiske, and G. Lindzey, eds. Boston: McGraw-Hill, 680–740.

Beehr, T. A., Drexler, J. A., Jr., and Faulkner, S. (1997), "Working in small family businesses: empirical comparisons to non-family businesses," *Journal of Organizational Behavior*, 18(3), 297–312.

Berens, G., van Riel, C. B. M., and van Bruggen, G. H. (2005), "Corporate associations and consumer product responses: the moderating role of corporate brand dominance," *Journal of Marketing*, 69(3), 35–48.

Berthon, P., Hulbert, J. M., and Pitt, L. F.(1999), "To serve or create? Strategic orientations toward customers and innovation," *California Management Review*, 42(1), 37–58.

Blundell, R., Griffin, R., and Van Reenen, J. (1999), "Market Share, Market Value *and* Innovation in a Panel of British Manufacturing Firms," *Review of Economic Studies*, 66(3), 529–554.

Booth, L., Aivazian, V., Demirguc-Kunt, A., and Maksimovic, V. (2001), "Capital Structure in Developing Countries," *Journal of Finance*, 56(1), 87–130.

Boyd, E. D., Chandy, R., and Cunha, M. (2010), "When do Chief Marketing Officers impact Firm Value? A Customer Power Explanation," *Journal of Marketing Research*, 47(December), 1162–1176.

Brammer, S., and Millington, A. (2008), "Does it pay to be different? An analysis of the relationship between corporate social and financial performance," *Strategic Management Journal*, 29(12), 1325–1343.

Brealey, R. A., and Myers, S. C. (2003), *Principles of Corporate Finance*, 6th edition. McGraw-Hill Irwin: New York, NY.

Briscoe, F., and Safford, S. (2008), "The Nixon-in-China Effect: Activism, Imitation, and the Institutionalization of Contentious Practices," *Administrative Science Quarterly*, 53(3): 460–491.

Brown, S. J., and Warner, J. B. (1985), "Using Daily Stock Returns: The Case of Event Studies," *Journal of Financial Economics*, 14(1), 3–31.

Brown, T. J. (1998), "Corporate associations in marketing: antecedents and consequences," *Corporate Reputation Review*, 1(3), 215–233.

Budros, A. (1999), "A Conceptual Framework for Analyzing Why Organizations Downsize," *Organization Science,* 10(1): 69–83.

BusinessWeek (2003, November 10), "*Defining Family*," Available at [http://www.businessweek.com/pdfs/2003/0345_familyfirms.pdf]

Cabral, L. M. B. (2009), "Umbrella branding with imperfect observability and moral hazard," *International Journal of Industrial Organization*, 27(2), 206-213.

Cameron, K. S. (1997), "Techniques for Maintaining Organizations Effective," in *Enhancing Organizational Performance*, Druckman, D., Singer, J., Van Cott, H., eds. Washington, DC: National Academy Press, 39–64.

Carney, M. (2005), "Corporate governance and competitive advantage in family controlled firms," *Entrepreneurship Theory and Practice*, 29(3), 249-265.

Casson, M. (1999), "The economics of the family firm," *Scandinavian Economic History Review*, 47(1): 10–23.

Chaney, P. K., Devinney, T. M., and Winer, R. S. (1991), "The Impact of New Product Introductions on the Market Value of the Firm," *Journal of Business,* 64 (4), 573–610.

Chauvin, K. W., and Hirschey, M. (1993), "Advertising, R&D Expenditures and the Market Value of the Firm," *Financial Management,* 22 (4), 128–140.

Chiu, S., and Sharfman, M. P. (2011), "Legitimacy, visibility, and the antecedents of corporate social performance: An investigation of instrumental perspective," *Journal of Management*, 37(6): 1558–1585.

Chung, K. H., and Pruitt, S. W. (1994), "A Simple Approximation of Tobin's q," *Financial Management*, 23(3): 70–74.

Cierpicki, S., Malcolm W., and Sharp, B. (2000), "Managers' knowledge of marketing principles: The case of new product development," *Journal of Empirical Generalizations in Marketing Science,* 5(3), 771–790.

Coleman, J. S. (1990), *Foundations of Social Theory*. Cambridge, MA: Harvard University Press.

Colli, A. (2003). *The History of Family Business, 1850-2000*. Cambridge: Cambridge University Press.

Cooper, R. G. (2000). *Product Leadership: Creating and Launching Superior New Products.* Cambridge, MA: Perseus Books.

Cruz, C. C., Gómez-Mejia, L. R., and Becerra, M. (2010), "Perceptions of Benevolence and the Design of Agency Contracts: CEO-TMT relationships in family firms," *Academy of Management Journal*, 53(1): 69–89.

Davidson, W. N. III, and Worrell, D. (1992), "Research notes and communications: The effect of product recall announcements on shareholder wealth," *Strategic Management Journal*, 13 (6), 467–474.

DeAngelo, H., and DeAngelo, L. (1985), "Managerial ownership of voting rights: A study of public corporations with dual classes of common stock," *Journal of Financial Economics*, 14(1): 33–69.

Deleersnyder, B., Dekimpe, M. G., Steenkamp, J-B. E. M., and Leeflang, P. S. H. (2009), "The Role of National Culture in Advertising's Sensitivity to Business Cycles: An Investigation Across Continents," *Journal of Marketing Research,* 46(5), 623–636.

Demsetz, H. (1983), "The Structure of Ownership and the Theory of the Firm," *Journal of Law and Economics*, 26(2), 375–390.

Deshpandé, R., and Farley, J. U. (2004). "Organizational culture, market orientation, innovativeness, and firm performance: an international research odyssey," *International Journal of Research in Marketing.* 21(1), 3–22.

Diener, E., and Diner, M. (1995), "Cross-Cultural Correlates of Life Satisfaction and Self-Esteem," *Journal of Personality & Social Psychology*, 68(4), 653–663.

Du, S., Bhattacharya, C. B., and Sen, S. (2007), "Reaping relational rewards from corporate social responsibility: The role of competitive positioning," *International Journal of Research in Marketing,* 24(3), 224–241.

Dyer, W. G., Jr. (1992). *The entrepreneurial experience: Confronting career dilemmas of the start-up executive*. San Francisco, CA: Jossey-Bass.

Dyer, W. G., Jr., and Whetten, D. A. (2006). Family firms and social responsibility: Preliminary evidence from the S&P 500. *Entrepreneurship Theory & Practice*, 30(6), 785–802.

Faccio, M., and Lang, L. H. P. (2002), "The ultimate ownership of Western European corporations," *Journal of Financial Economics*, 65, 365–395.

Fama, E. F., and Jensen, M. C. (1983), "Separation of Ownership and Control," *Journal of Law & Economics*, 26(2), 301–326.

Fama, E. F, and French, K. R. (2002), "Testing trade-off and pecking order predictions about dividends and debt," *Review of Financial Studies*, 15(1), 1–33.

Frankenberger, K. D., and Graham, R. C. (2003), "Should Firms Increase Advertising Expenditures During Recessions?" *MSI Reports* 03-115, 65–85.

Franklin, D. (2008, January 19). A special report on corporate social responsibility: Just good business. *The Economist.*

Frieder, L., Subrahmanyam, A. (2005), "Brand Perceptions and the Market for Common Stock," *Journal of Financial and Quantitative Analysis*, 40(1), 57–85.

Fukuyama, F. (1996). *Trust: The Social Virtues and the Creation of Prosperity*. London: Free Press.

Gersick, K. E., Davis, J. A., Hampton, M. M., and Lansberg, I. (1997), *Generation to Generation: Life Cycles of the Family Business*. Boston, MA: Harvard Business School Press.

Gielens, K., van De Gucht, L.M., Steenkamp, J-B. E. M., and Dekimpe, M. G. (2008), "Dancing with a Giant: The Effect of Wal-Mart's Entry into the United Kingdom on Stock Prices of European Retailers," *Journal of Marketing research*, 45 (October), 519–534.

Godfrey, P. C. (2005), "The relationship between corporate philanthropy and shareholder wealth: A risk management perspective," *Academy of Management Review*, *30*(4), 777–798.

Golder, P. N., and Tellis, G. J. (1993), "Pioneer advantage: Marketing logic or marketing legend?," *Journal of Marketing Research*, 30(2), 158–170.

Gomez-Mejia, L. R., Nuñez-Nickel, M., and Gutierrez, I. (2001), "The role of family ties in agency contracts," *Academy of Management Journal*, 44(1), 81–95.

Gomez-Mejia, L. R., Haynes, K. T., Nuñez-Nickel, M., and Jacobson, K. J. L., Moyano-Fuentes, J. (2007), "Socioemotional wealth and business risks in family controlled firms: Evidence from Spanish olive oil mills," *Administrative Science Quarterly*, 52(1), 106–137.

Griffin, A. (1997), "PDMA Research on New Product Development Practices: Updating Trends and Benchmarking Best Practices," *Journal of Product Innovation Management*, 14(6), 429–458.

Grossman, S. J., and Hart, O. D. (1980), "Takeover Bids, the Free-Rider Problem, and the Theory of the Corporation," *The RAND Journal of Economics*, 11(1), 42–64.

Grullon, G., Kanatas, G., and Weston, J. P. (2004), "Advertising, breadth of ownership and liquidity," *The review of financial studies*, 17(2), 439–61.

Grullon, G., Kanatas, G., and Kumar, P. (2006), "The Impact of Capital Structure on Advertising Competition: An Empirical Study," *Journal of Business*, 79(6), 3101–3124.

Hair, Jr., Anderson, R. E., Tatham, R. L., and Black, W. C. (1995). *Multivariate Data Analysis*, 4th ed. Englewood Cliffs, NJ: Prentice-Hall.

Hambrick, Donald C., and Phyllis A. Mason (1984), "Upper echelons: The organization as a reflection of its top managers," *Academy of Management Review*, 9 (April), 193–206.

Heckman, J. (1979), "Sample selection bias as a specification error," *Econometrica,* 47(1), 153–61.

Himmelberg, C. P., Hubbard, R. G., and Palia, D. (1999), "Understanding the determinants of managerial ownership," *Journal of Financial Economics*, 53, 353–384.

Hogg, M. A. (2003). Social identity. In M.R. Leary and J.P. Tangney (Eds.), *Handbook of self and identity* (pp. 462–479). New York: Guilford Press.

Horsky, D., and Swyngedouw, P. (1987). Does it pay to change your company's name? A stock market perspective. *Marketing Science*, 6(4), 320–335.

Hsiao, C. (2003). *Analysis of panel data,* 2nd ed. Cambridge, United Kingdom: Cambridge University Press.

Hull, C. E., and Rothenberg, S. (2008), "Firm performance: the interactions of corporate social performance with innovation and industry differentiation," *Strategic Management Journal*, 29(7), 781–789.

Hyde, P., Landry, E., and Tipping, A. (2004), "Making the perfect marketer," *Strategy+Business*, 37(winter), 37–43.

Ichniowski, C., and Shaw, K. (1999), "The effects of human resource management systems on economic performance: An international comparison of U.S. and Japanese plants," *Management Science*, 45(5), 704–721.

Interdepartmental working group on CSR, (2002). CSR Case study: Weyerhaeuser. A legacy of acting responsibility.

Jensen, M. C., Meckling, W. H. (1976), "Theory of the firm: managerial behavior, agency costs and ownership structure," *Journal of Financial Economics*, 3(4), 305–360.

Johnson, B. (2003), "Recession's end doesn't mean much for Ad market," *Advertising Age*, 74(29), 8.

Kelm, K. M., Narayanan, V. K., and Pinches, G. E. (1995), "Shareholder Value Creation during R&D and Commercialization Stages," *Academy of Management Journal*, 38 (June), 770–786.

Kennedy, P. (2003). *A guide to econometrics,* 5th ed. Cambridge, MA: MIT Press.

Kerin, R. A. (2005, October), "Strategic marketing and the CMO. In marketing renaissance: opportunities and imperatives for improving marketing thought, practice, and infrastructure," *Journal of Marketing*, 69(4), 12–14.

Kerin, R. A., Rudelius, W., and Hartley, S. W. (2008). *Marketing,* 9th edition, New York, NY: McGraw-Hill/Irwin.

Kets de Vries, M. F. R., Carlock, R. S., and Florent-Treacy, E. (2007). *Family Business on the Couch: A Psychological Perspective*. Chichester, England: John Wiley & Sons Publications.

Kets de Vries, M. F. R. (1993), "The dynamics of family controlled firms: The good and the bad news," *Organizational Dynamics*, 21(3), 59–71.

Kiyotaki, N., and Moore, J. (1997), "Credit Cycles," *Journal of Political Economy*, 105(2), 211–248.

Klein, J., and Dawar, N. (2004), "Corporate social responsibility and consumers' attributions and brand evaluations in a product-harm crisis," *International Journal of Research in Marketing*, 21(3), 203–217.

Lamey, L., Deleersnyder, B., Dekimpe, M. G., and Steenkamp J-B. E. M. (2007), "How Business Cycles Contribute to Private-Label Success: Evidence from the U.S. and Europe," *Journal of Marketing*, 71(January), 1–15.

Landes, D. S. (2008). *Dynasties: Fortune and Misfortune in the World's Great Family Businesses*. London: Penguin Press.

Lansberg, I. (1999). *Realizing the Dream of Families in Business*. Cambridge, MA: Harvard Business School Press.

Lee, R. P., and Chen, Q. (2009), "The Immediate Impact of New Product Introductions on Stock Price: The Role of Firm Resources and Size," *Journal of Product Innovation Management,* 26 (1), 97–107.

Levinthal, D., and March, J. G. (1981), "A model of adaptive organizational search," *Journal of Economic Behavior and Organization,* 2, 307–333.

Luo, X., and Bhattacharya C. B. (2006), "Corporate social responsibility, customer satisfaction, and market value," *Journal of Marketing*, 70(4), 1–18.

Madden, T. J., Fehle, F., and Fournier, S. (2006), "Brands Matter: An Empirical Demonstration of the Creation of Shareholder Value Through Branding," *Journal of the Academy of Marketing Science,* 34(2), 224–235.

Maignan, I., Ferrell, O. C., and Hult, G. T. M. (1999), "Corporate Citizenship: Cultural Antecedents and Business Benefits," *Journal of the Academy of Marketing Science*, 27(4), 455–469.

Marquis, C., Glynn, M. A., and Davis, G. F. (2007), "Community Isomorphism and Corporate Social Action," *Academy of Management Review*, 32(3), 925–945.

McGuire, J. B., Sundgren, A., and Schneeweis, T. (1988), "Corporate Social Responsibility and Firm Financial Performance," *Academy of Management Journal*, 31(4), 854–872.

Mattingly, J. E., and Berman, S. L. (2006), "Measurement of Corporate Social Action: Discovering Taxonomy in the Kinder, Lydenburg, Domini Ratings Data," *Business & Society* (45), 20–46.

McCullagh, P., and Nelder, J. A. (1989). *Generalized Linear Models,* 2nd ed. London: Chapman and Hall.

McGuire, J., Sundgren, A., and Schneeweis, T. (1988), "Corporate social responsibility and firm financial performance," *Academy of Management Journal,* 31(4), 854–872.

McGovern, G. J., Court, D., Quelch, J. A., and Crawford, B. (2004, November), "Bringing customers into the boardroom," *Harvard Business Review*, 82(1), 70–80.

Mela, C. F., Gupta, S., and Lehmann, D. R. (1997), "The long-term impact of promotion and advertising on consumer brand choice," *Journal of Marketing Research,* 34(2), 248–261.

Miller, T. W., Mathisen, R. E., and McAllister, J. P. (2005), "The Market-Implied Economic Lives of Advertising Expenses and R&D Expenses," *Journal of Accounting and Finance Research*, 13(3), 89–105.

Mizik, N., and Jacobson, R. (2003), "Trading off between value creation and value appropriation: The financial implications of shifts in strategic emphasis," *Journal of Marketing,* 67(1), 63–76.

Mizik, N., and Jacobson, R. (2007), "Myopic Marketing Management: The Phenomenon and Its Long-Term Impact on Firm Value," *Marketing Science*, 26(3), 361–379.

Mizik, N. (2010), "The Theory and Practice of Myopic Management," *Journal of Marketing Research*, 47(4), 594–611.

Montgomery, C. A., and Wernerfelt, B. (1988), "Diversification, Ricardian Rents, and Tobin's q," *The RAND Journal of Economics*, 19(4), 623–632.

Morck, R., Shleifer, A., and Vishny, R. (1988), "Management ownership and market valuation: An empirical analysis," *Journal of Financial Economics*, 20, 293–315.

Morck, R., Strangeland, D., and Yeung, B. (2000), "Inherited Wealth, corporate control, and economic growth: the Canadian disease," in *Concentrated Corporate Ownership*, Randall Morck, ed. Chicago: Univ. of Chicago Press, 319–369.

Muller, A., and Kräussl, R. (2011), "Doing Good Deeds in Times of Need: A Strategic Perspective on Corporate Disaster Donations," *Strategic Management Journal*, 32(9), 911–929.

Nath, P., and Mahajan, V. (2008), "Chief marketing officers: A study of their presence in firms' top management Teams," *Journal of Marketing,* 72(1), 65–81.

Neubaum, D. O., and Zahra, S. A. (2006), "Institutional Ownership and Corporate Social Performance: The Moderating Effects of Investment Horizon, Activism, and Coordination," *Journal of Management*, 32 (1), 108–131.

Nixon, R. D., Hitt, M. A., Lee, H-U., and Jeong, E. (2004), "Market Reactions to Announcements of Corporate Downsizing Actions and Implementation Strategies," *Strategic Managerial Journal*, 25(11), 1121–1129.

Pauwels, K., Silva-Risso, J., Srinivasan, S., and Hanssens, D. M. (2004), "New products, sales promotions and firm value, with application to the automobile Industry," *Journal of Marketing,* 68(4), 142–156.

Palepu, K. (1985), "Diversification strategy, profit performance, and the entropy measure," *Strategic Management Journal*, 6(3), 239–255.

Pearl, J. A. (2003), "The family: Asset or liability?" *Family Business Magazine*, Spring.

Perrini, F., Russo, A., and Tencati, A. (2007), "CSR strategies of SMEs and large firms. Evidence from Italy," *Journal of Business Ethics*, 74(3), 285–300.

Preacher, K. J., and Hayes, A. F. (2008), "Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models," *Behavior Research Methods*, 40(3), 879–891.

Putnam, R., Leonardi, R., and Nanetti, R.Y. (1993), *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton, NJ: Princeton University Press.

Reiss, D. (1981), *The Family's Construction of Reality*. Cambridge, MA: Harvard University Press

Rhee, M., and Haunschild, P. R. (2006), "The liability of good reputation: a study of product recalls in the U. S. automobile industry," *Organization Science,* 17 (1), 101–117.

Rubenstein, C. (1990, February), "Power and priorities," *Family Business Magazine,* 2, 37.

Rust, R. T., Ambler, T., Carpenter, G. S., Kumar, V., and Srivastava, R. K. (2004), "Measuring Marketing Productivity: Current Knowledge and Future Directions," *Journal of Marketing*, 68(4), 76–89.

Schein, E. H. (1983), "The role of the founder in creating organization cultures," *Organizational Dynamics*, 12(1), 13–28.

Schulze, W.S., Lubatkin, M. H., and Dino, R. N. (2003), "Toward a theory of agency and altruism in family firms," *Journal of Business Venturing*, 18(4), 473–490.

Sen, S., and Bhattacharya, C. B. (2001), "Does Doing Good Always Lead to Doing Better? Consumer reactions to corporate social responsibility," *Journal of Marketing Research*, 38(2), 225–243.

Sethuraman, R., and Tellis, G. J. (1991), "An analysis of the tradeoff between advertising and pricing," *Journal of Marketing Research*, 28(2), 160–174.

Sharfman, M. (1996), "The Construct Validity of the Kinder, Lydenberg and Domini Social Performance Ratings Data," *Journal of Business Ethics,* 15, 287–296.

Sharma, P., and Manikutty, S. (2005), "Strategic divestments in family firms: Role of family structure and community culture," *Entrepreneurship: Theory and Practice*, 29(3), 293–311.

Sood, A., and Tellis, G. J. (2009), "Do Innovations Really Pay Off? Total Stock Market Returns to Innovation," *Marketing Science,* 28 (3), 442–456.

Sorescu, A., Chandy, R., and Prabhu J. C. (2003), "Sources and Financial Consequences of Radical Innovation: Insights from Pharmaceuticals," *Journal of Marketing*, 67 (4), 82–101.

Sorescu, A. (2011), "Innovation and The Market Value of Firms", in the *Handbook of Marketing and Finance*, edited by Shankar Ganesan and Sundar Bharadwaj, Edward Elgar Publishing, forthcoming.

Srinivasan, S., Pauwels, K., Silva-Risso, J. M., and Hanssens, D. M. (2009), "Product innovations, advertising, and stock returns," *Journal of Marketing*, 73, 24–43.

Srinivasan, R., Rangaswamy, A., and Lilien, G. L. (2005), "Turning adversity into advantage: Does proactive marketing during a recession pay off?," *International Journal of Research in Marketing*, 22(2), 109–125.

Srinivasan, R., Lilien, G. L., and Sridhar, S. (2011), "Should firms spend more on Research and Development and Advertising During Recessions?" *Journal of Marketing*, 75(3), 49–65.

Srivastava, R. K., Shervani, T. A., and Fahey, L. (1998), "Market based assets and shareholder value: A framework for analysis," *Journal of Marketing*, 62(1), 2–18.

Stam, W. (2009), "When Does Community Participation Enhance the Performance of Open Source Software Companies?" *Research Policy*, 38(8), 1288–1299.

Steenkamp, J-B. E. M., and Fang, E. (2011), "The Impact of Economic Contractions on the Effectiveness of R&D and Advertising: Evidence from U.S. Companies spanning three decades," *Marketing Science*, 30(4), 628–645.

Stevens, J. (2009), *Applied Multivariate Statistics for the Social Sciences* (5th edition). New York, NY: Routledge.

Swaminathan, V., and Moorman, C. (2009), "Marketing Alliances, Firm Networks, and Firm Value Creation," *Journal of Marketing*, 73, 52–69.

Szwajkowski, E., and Figlewicz, R. E. (1999), "Evaluating corporate performance: a comparison of the Fortune reputation survey and the Socrates social rating database," *Journal of Managerial Issues*, 11, 137–154.

Tanewski, G. A., Prajogo, D., and Sohal, A. (2003), "Strategic orientation and innovation performance between family and non-family firms," in *ICSB 48th World Conference Proceedings*, G. Berrow ed. International Council for Small Business, Northern Ireland, 1–21.

Taguiri, R., and Davis, J. (1996), "Bivalent attributes of the family firm," *Family Business Review*, 9(2), 199–208.

Teece, D. J. (1987), "Profiting for technological innovation: implications for integration, collaboration, licensing, and public policy," in *The competitive challenge: Strategies for industrial innovation and renewal*, D.Teece ed. Cambridge, MA: Ballinger Publishing Company.

Tipton, M., Bharadwaj, S., and Robertson, D. (2009), "Regulatory exposure of deceptive marketing and its impact on firm value," *Journal of Marketing*, 73, 6, 227–243.

Turban, D. B., and Greening, D. W. (1996), "Corporate Social Performance and Organizational Attractiveness to Prospective Employees," *Academy of Management Journal*, 40(3), 658–672.

Verhoef, P. C., and Leeflang, P. S. H. (2009), "Understanding the marketing department's influence within the firm," *Journal of Marketing*, 73(2), 14–37.

Villalonga, B., and Amit, R. (2006), "How do family ownership, control and management affect firm value?" *Journal of Financial Economics*, 80(2), 385–417.

Villalonga, B. (2004), "Intangible resources, Tobin's q, and sustainability of performance differences," *Journal of Economic Behavior & Organization*, 54(2), 205–231.

Waddock, S. A., and Graves, S. B. (1997), "The corporate social performance-financial performance link," *Strategic Management Journal*, 18(4), 303–319.

Wernerfelt, B. (1984), "The Resource-Based View of the Firm," *Strategic Management Journal*, 5(2), 171–180.

Whetten, D. A., and Mackey, A. (2002), "A social actor conception of organizational identity and its implications for the study of organizational reputation," *Business and Society*, 41(4), 393–414.

Zahra, S. (2003), "International Expansion of U.S. Manufacturing Family Businesses: The Effect of Ownership and Involvement," *Journal of Business Venturing*, 18(4), 495–512.

Zahra, S. A., Hayton, J. C., and Salvato, C. (2004), "Entrepreneurship in family vs. non-family firms: A resource-based analysis of the effect of organizational culture," *Entrepreneurship Theory and Practice*, 28(4), 363–381.

Zeger, S. L., and Liang, K-Y., (1986), "Longitudinal data analysis for discrete and continuous outcomes," *Biometrics*, 42(1), 121–130.

Vita

Saim Kashmiri was born and raised in Lahore, Pakistan. He attended Aitchison College, Lahore, from where he earned the School Certificate (Cambridge University Syndicate) in 1992 and Higher School Certificate (Cambridge University Syndicate) in 1994. In 1999 he earned the Bachelors of Science degree (recommended by the Department of Chemical Engineering) at the Massachusetts Institute of Technology (MIT) while in 2002 he earned the Masters of Business Administration degree at the Lahore University of Management Science (LUMS). From June 2002 to August 2007 Saim worked in Global Fortune 500 companies such as Procter and Gamble and Nestlé, in brand management positions. In August, 2007, he entered the Marketing Doctoral Program at the McCombs School of Business, University of Texas at Austin.

Permanent Address: 3371 Lake Austin Blvd. #B, Austin, Texas 78703, U.S.A.

Email Address: saim@alum.mit.edu

This dissertation was typed by Saim Kashmiri.